DENON

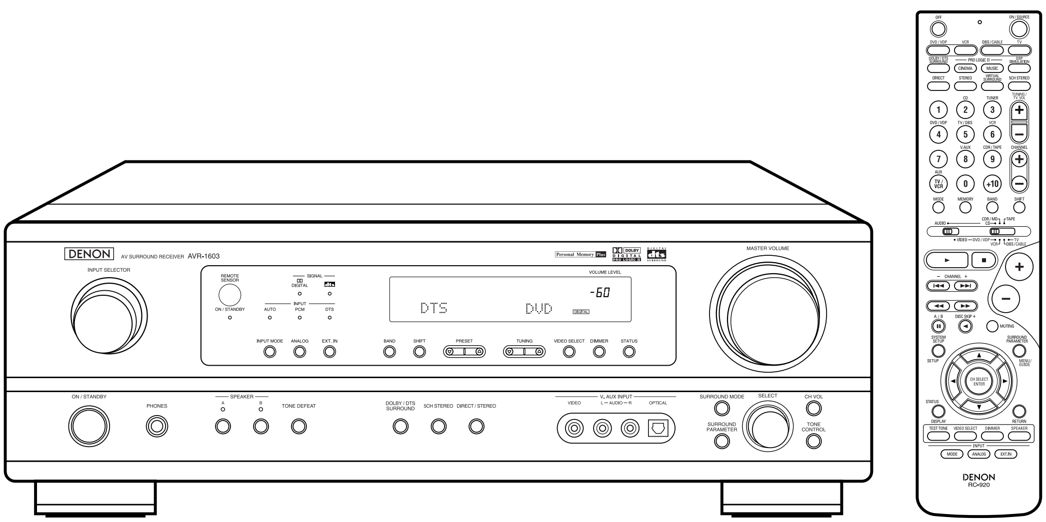
For U.S.A., Canada, Europe, U.K., Australia, Asia, China, Hong Kong, Taiwan R.O.C. & Korea model

Hi-Fi Component

SERVICE MANUAL

MODEL AVR-1603/683

AV SURROUND RECEIVER



● **Some illustrations using in this service manual are slightly different from the actual set.**

DENON, Ltd.

16-11, YUSHIMA 3-CHOME, BUNKYOU-KU, TOKYO 113-0034 JAPAN
Telephone: 03 (3837) 5321

X0152 NC 0209

SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

SPECIFICATIONS

■ Audio Section

Power Amplifier

Rated output:	Front:	80W+80W	(8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D) (U.S.A., & Canada Models)
		70W+70W	(8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D) (Europe, U.K., Australia & Asia)
		110W+110W	(6Ω/ohms, 1kHz with 0.7% T.H.D) (U.S.A., & Canada Models)
		100W+100W	(6Ω/ohms, 1kHz with 0.7% T.H.D) (Europe, U.K. & Australia Models)
		110W+110W	(6Ω/ohms, EIAJ) (Asia Model)
	Center:	80W	(8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D) (U.S.A., & Canada Models)
		70W	(8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D) (Europe, U.K. & Australia & Asia)
		110W	(6Ω/ohms, 1kHz with 0.7% T.H.D) (U.S.A., & Canada Models)
		100W	(6Ω/ohms, 1kHz with 0.7% T.H.D) (Europe, U.K. & Australia Models)
		110W	(6Ω/ohms, EIAJ) (Asia Model)
	Surround:	80W+80W	(8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D) (U.S.A., & Canada Models)
		70W+70W	(8Ω/ohms, 20Hz~20kHz with 0.08% T.H.D) (Europe, U.K. & Australia & Asia)
		110W+110W	(6Ω/ohms, 1kHz with 0.7% T.H.D) (U.S.A., & Canada Models)
		100W+100W	(6Ω/ohms, 1kHz with 0.7% T.H.D) (Europe, U.K. & Australia Models)
		110W+110W	(6Ω/ohms, EIAJ) (Asia Model)
Output terminals:	Front:	A or B	6 to 16Ω/ohms
		A+B	12 to 16Ω/ohms
	Center/Surround:		6 to 16Ω/ohms
LINE input - SPEAKER OUT			
Input sensitivity/input impedance:	200mV/47kΩ/kohms		
Frequency response:	10Hz~100kHz: +1, –3dB		(TONE DEFEAT ON)
S/N ratio:	98dB (IHF-A weighted)		(TONE DEFEAT ON)

■ Video Section

Standard video jacks

Input/output level and impedance:	1Vp-p,75Ω/ohms
Frequency response:	5Hz~10MHz — +1, –3dB

S-video jacks

Input/output level and impedance:	Y(brightness)signal — 1Vp-p, 75Ω/ohms
	C(color)signal — 0.286Vp-p, 75Ω/ohms
Frequency response:	5Hz~10MHz: — +1, –3dB

Color component video jacks (U.S.A. & Canada Models)

Input/output level and impedance:	Y(brightness)signal — 1Vp-p, 75Ω/ohms
	P_B/C_B(blue)signal — 0.7Vp-p, 75Ω/ohms
	P_R/C_R(red)signal — 0.7Vp-p, 75Ω/ohms
Frequency response:	5Hz~27MHz: — +0, –3dB

■ Tuner section

Receiving range:	**[FM]** (note: µV at 75Ω/ohms, 0dBf =1×10^{-15}W)		**[AM]**
U.S.A., & Canada Models:	87.50MHz~107.90MHz		520kHz~1710kHz
Europe U.K. & Australia Models:	87.50MHz~108.00MHz		522kHz~1611kHz
Asia Model:	87.50MHz~107.90MHz (0.2MHz steps)		520kHz~1710kHz (10kHz steps)
	87.50MHz~108.00MHz (0.05MHz steps)		522kHz~1611kHz (9kHz steps)
Usable sensitivity:	1.0µV (11.2dBf)		18µV
50 dB quieting sensitivity:	MONO	1.6µV (15.3dBf)	
	STEREO	23µV (38.5dBf)	
S/N ratio:	MONO	80dB (IHF-A weighted)	
	STEREO	75dB (IHF-A weighted)	
Total harmonic distortion:	MONO	0.15% (1kHz)	
	STEREO	0.3% (1kHz)	

■ General

Power supply:	AC120V, 60Hz (U.S.A. & Canada Models) AC230V, 50Hz (Europe, U.K. & Australia Models) AC115/230V, 50/60Hz (Asia Model)
Power consumption:	4.0A (USA & Canada model) 210W (Europe, U.K., Australia & Asia models)
Maximum external dimensions:	434 (W) × 147 (H) × 417 (D) mm (17-3/32″ × 5-25/32″ × 1-23/64″)
Mass:	10.4kg (22 lbs 14.9 oz)

■ Remote control unit (RC-920)

Batteries:	R6P/AA Type (two batteries)
External dimensions:	55 (W) × 225 (H) × 34.5 (D) mm (2-11/64″ × 8-55/64″ × 1-9/64″)
Mass:	165g (Approx. 5.8 oz) (including batteries)

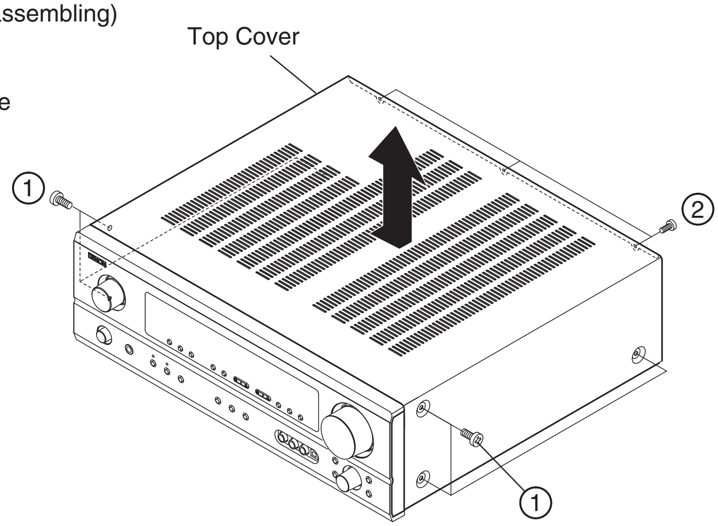
* For purposes of improvement, specifications and design are subject to change without notice.

DISASSEMBLY

(Follow the procedure below in the reverse order when reassembling)

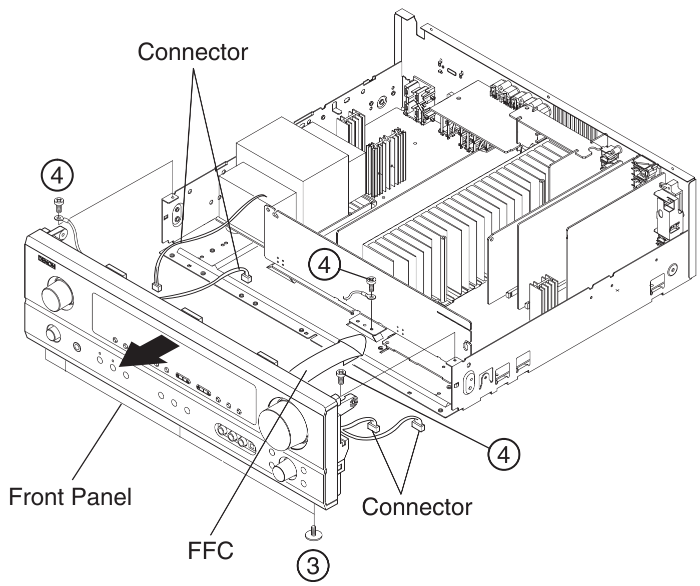
1. Top Cover

Remove 6 screws ① and 3 screws ②, then detach the Top Cover to the arrow direction.



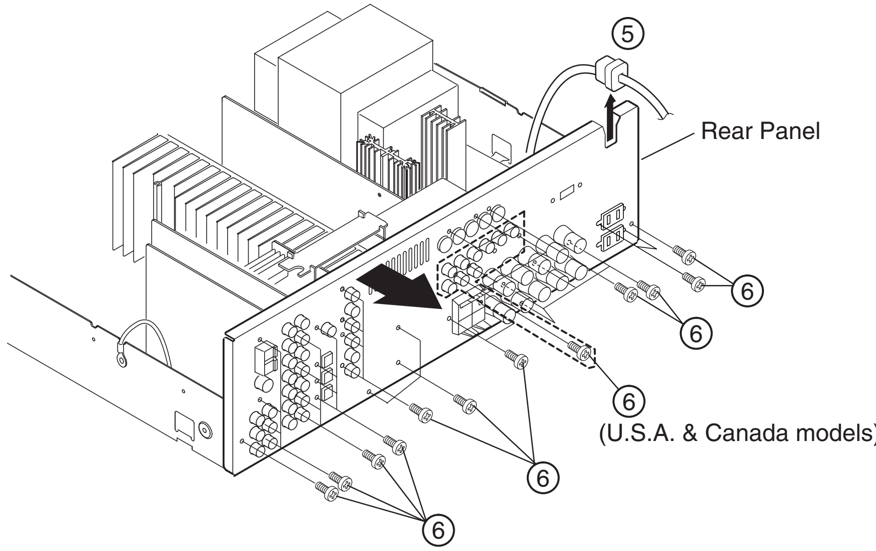
2. Front Panel

(1) Remove 4 screws ③ and 3 screws ④.
(2) Disconnect 3 connectors and FFC coming from the Front Panel side.
(3) Disconnect the connector coming from the Trans., and detach the Front Panel to the arrow direction.



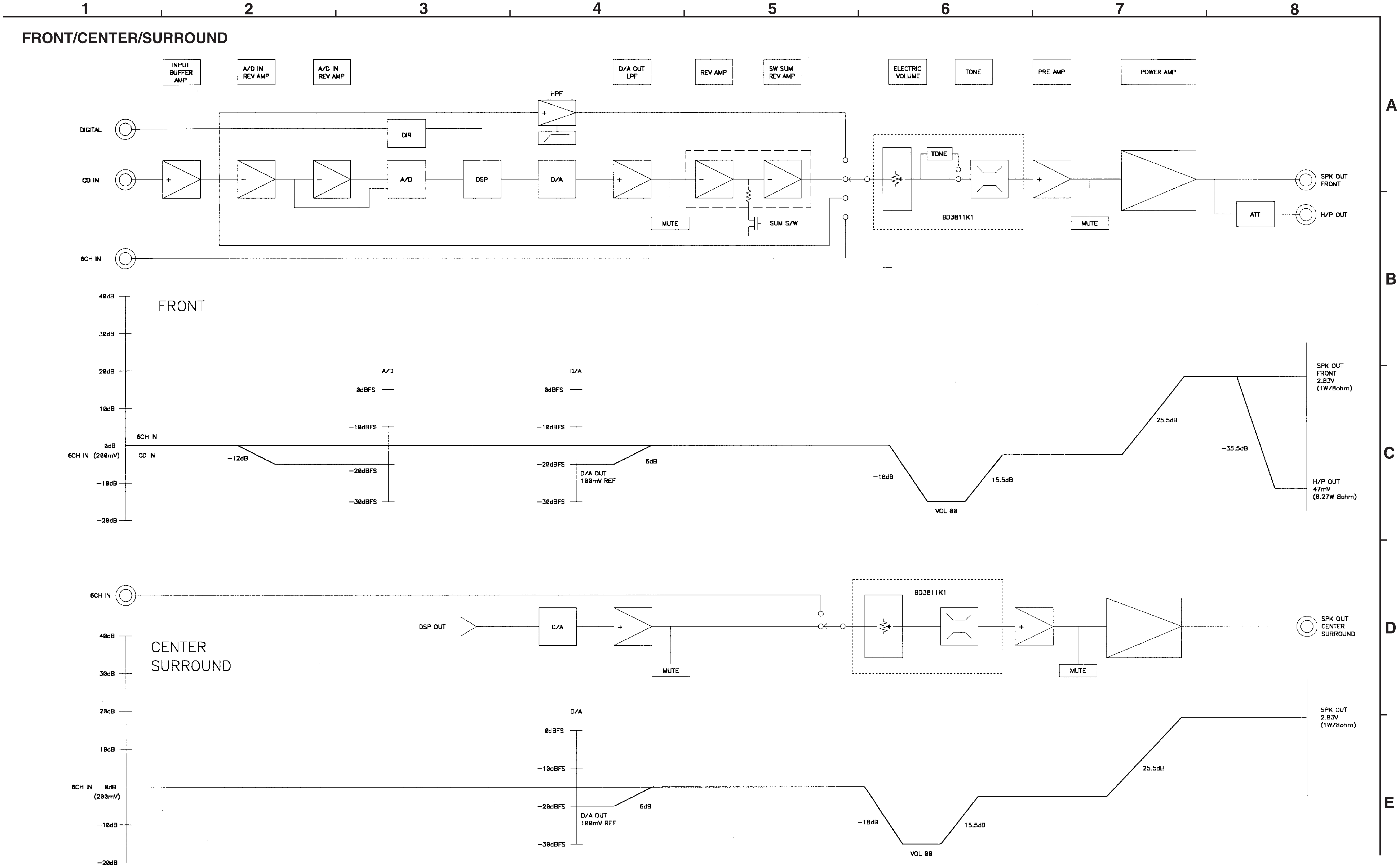
3. Rear Panel

(1) Take off the AC cord ⑤ .
(2) Remove 32 screws ⑥ (36 pieces for U.S.A. & Canada models).
(3) Detach the Rear Panel to the arrow direction.

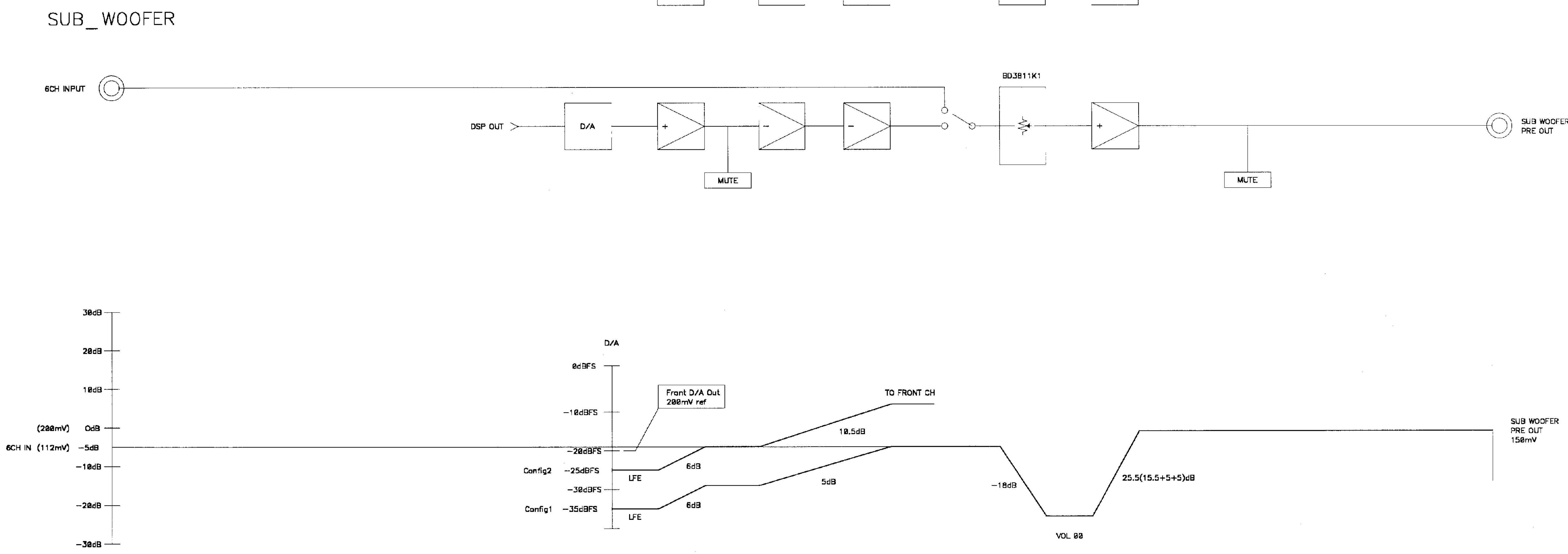


LEVEL DIAGRAMS

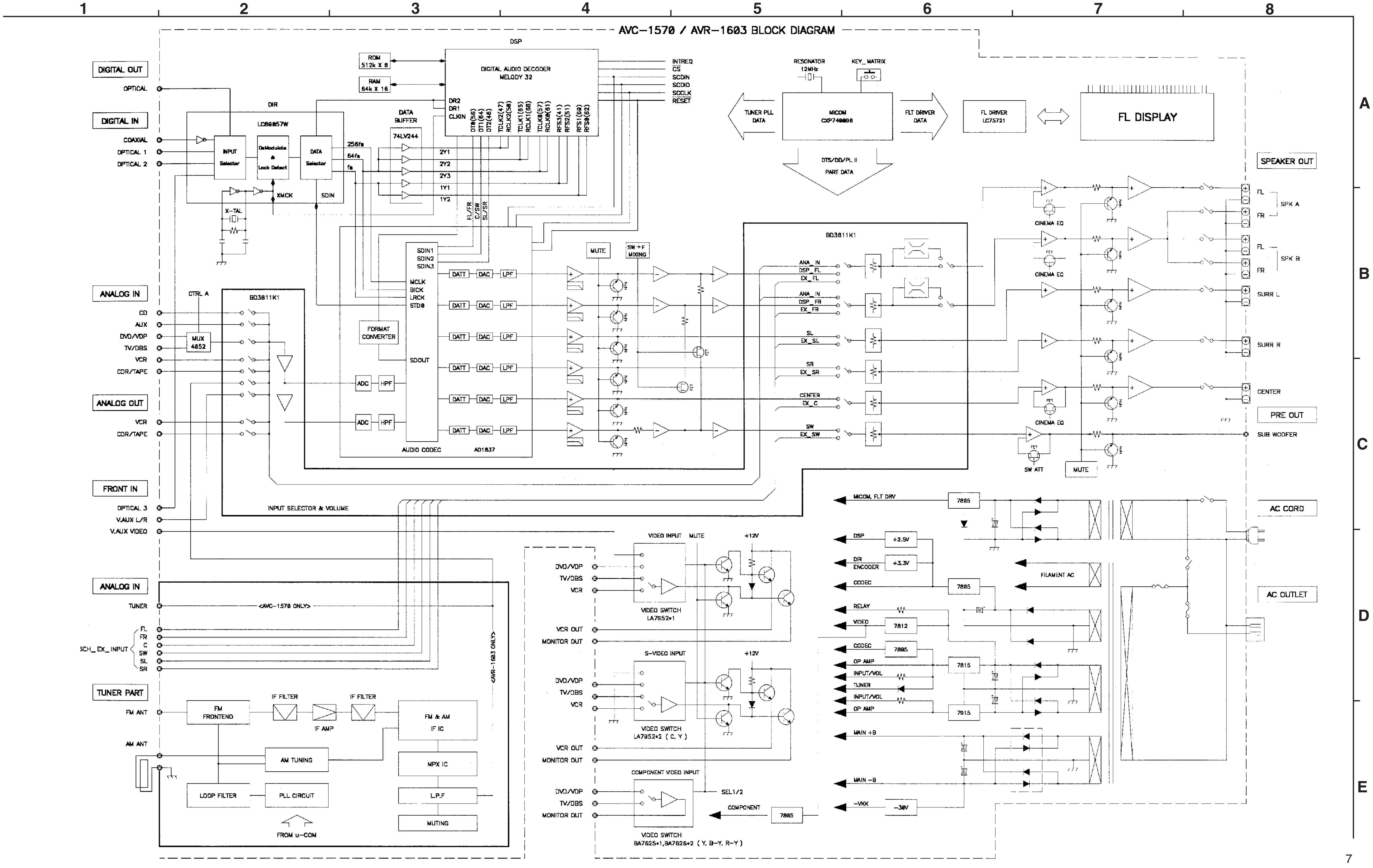
FRONT/CENTER/SURROUND



SUB WOOFER


SUB_WOOFER
D/A OUT LPF
REV AMP
SW SUM REV AMP
ELECTRIC VOLUME
PRE AMP
BD3811K1
6CH INPUT
DSP OUT
D/A
MUTE
MUTE
SUB WOOFER PRE OUT
30dB
20dB
10dB
(200mV) OdB
6CH IN (112mV) -5dB
-10dB
-20dB
-30dB
D/A
0dBFS
-10dBFS
-20dBFS
Config2 -25dBFS
-30dBFS
Config1 -35dBFS
Front D/A Out 200mV ref
LFE
LFE
6dB
6dB
10.5dB
5dB
TO FRONT CH
-18dB
VOL 80
25.5(15.5+5+5)dB
SUB WOOFER PRE OUT 150mV

BLOCK DIAGRAM

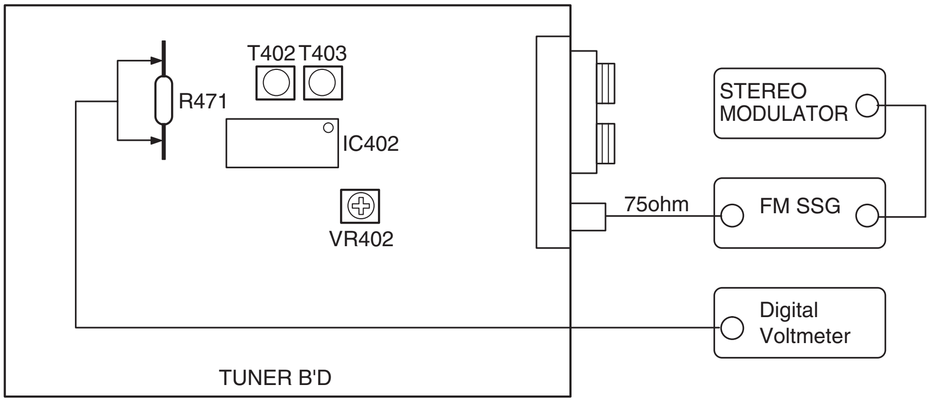


ADJUSTMENT

Tuner Section

CONNECTION DIAGRAM OF MEASURING INSTRUMENTS

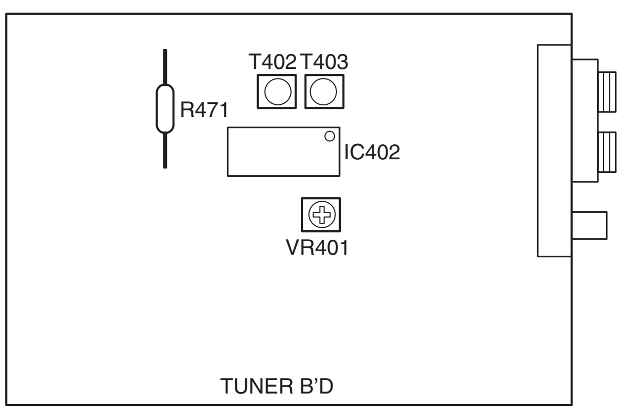
● FM



FM ALIGNMENT

Step	Alignment Item	Tuning Frequency Setting	Input					Output		Adjustment	
			Type	Frequency	Input Level	Modulation	Coupling	Type	Connect to	Points	Adjust to
1	Center Adjustment	98.1MHz (98.0MHz)	FM SSG	98.1MHz	60dBμ	Mono 1kHz 100%	Antenna Terminal	Digital Voltmeter	R471	T402	± 50mV
2	Distortion	98.1MHz (98.0MHz)	FM SSG	98.1MHz	60dBμ	Mono 1kHz 100%	Antenna Terminal	Distortion Meter	Output Terminal (L)	T403	Minimum Distortion
3	Repeat Steps 1 and 2										
4	Signal Level	98.1MHz (98.0MHz)	FM SSG	98.1MHz	20dBμ	OFF	Antenna Terminal	Light “TUNED” on FL Display		VR402	20^{+14}_{-10} dB

● AM



AM ALIGNMENT

Step	Alignment Item	Frequency	Input	Output		Adjustment		Remarks
				Type	Connect to	Points	Adjust to	
1	Signal Level	999 (1000) kHz	AM SSG	—	—	VR401	Light “TUNED” on FL Display	SSG OUTPUT 74dBμ (EMF)

Audio Section

Idling Current

Required measurement equipment : DC Voltmeter

Preparation

(1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room tempereture 15 °C ~ 30 °C (59 °F ~ 86 °F).

(2) Presetting
- POWER (Power sourse switch) → OFF
- SPEAKER (Speaker terminal) → No load (Do not connect speaker, dummy resistor, etc.)

Adjustment

(1) Remove top cover and set VR101, VR102, VR103, VR104, VR105 on Amp. Unit at full counterclockwise (↺) position.

(2) Connect DC Voltmeter to test points (FRONT-Lch: TP104, FRONT-Rch: TP105, CENTER ch: TP103, SURROUND-Lch: TP101, SURROUND-Rch: TP102).

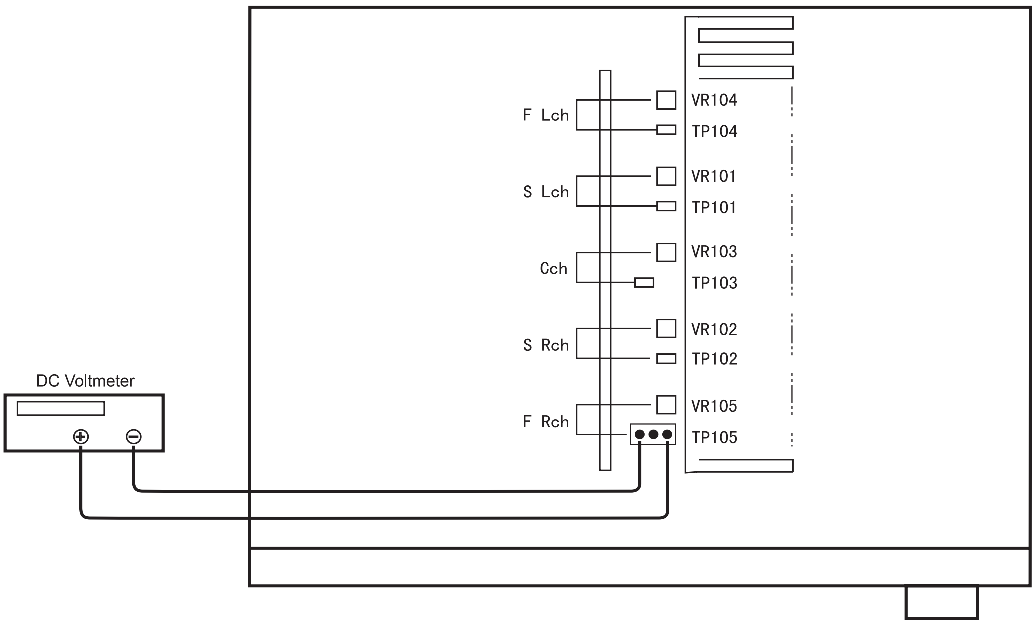
(3) Connect power cord to AC Line, and turn power switch "ON".

(4) Presetting. MASTER VOLUME : "---" counterclockwise (↺ min.)
MODE : 5CH STEREO
FUNCTION : CD

(5) Within 2 minutes after the power on, turn VR101 clockwise (↻) to adjust the TEST POINT voltage to 1.5 mV ±0.5 mV DC.

(6) After 10 minutes from the preset above, turn VR101 to set the voltage to 2.5 mV ±0.5 mV DC.

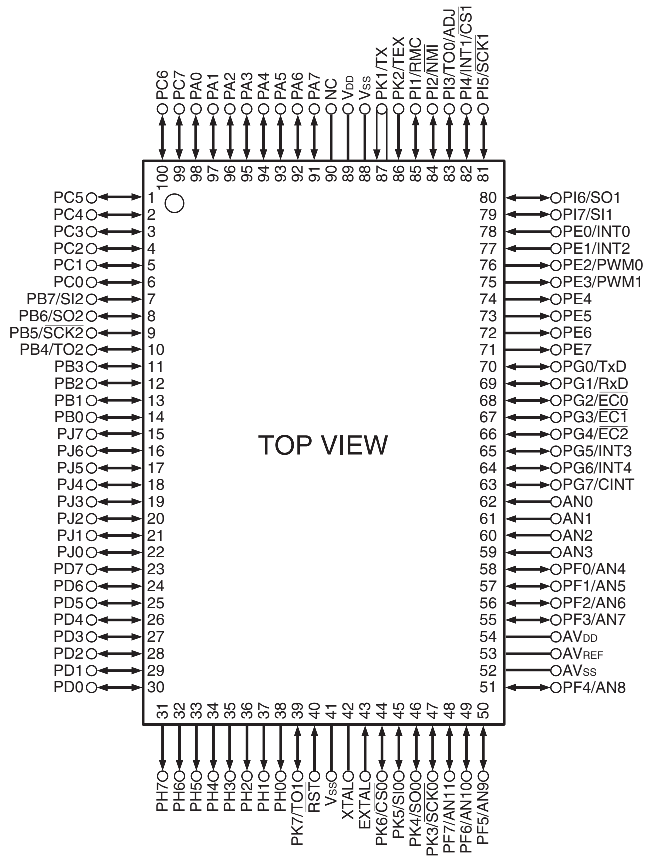
(7) Adjust the Variable Resistors of other channels in the same way.



SEMICONDUCTORS

● IC's

CXP740096
(IC201)



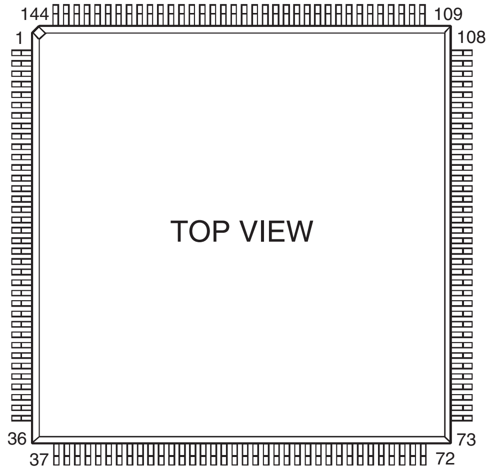
CXP740096 Terminal Function

Pin No.	Pin Name	I/O	Function
1	3811K1MUTE	O	BD3811K1 CONTROL
2	3811K1CLK	O	BD3811K1 CONTROL
3	3811K1DATA	O	BD3811K1 CONTROL
4	CDR/TAPE	O	CDR/TAPE INHIBIT
5	VCR	O	VCR INHIBIT
6	ERR MUTE	O	ERR MUTE
7	ERR MUTE OFF	O	ERR MUTE OFF
8	89057 AUDIO	I	LC89057 CONTROL
9	89057 EMPHA	I	LC89057 CONTROL
10	SW SUM	O	SW SUMMING CONTROL
11	M32 SDIN	I	DATA INPUT FROM MELODY32
12	89057 SDIN	I	DATA INPUT FROM LC89057
13	EPROM RESET	O	EPROM RESET
14	89057 RESET	O	LC89057 RESET
15	M32 CS	O	MELODY32 CS
16	M32 SDOUT	O	MELODY32 CONTROL DATA
17	89057 CE	O	LC89057 CE
18	89057 SDOUT	O	CONTROL DATA
19	89057 SCLK	O	CONTROL CLOCK
20	1837 RESET	O	CODEC RESET
21	NC	—	
22	SW MUTE	O	SW MUTE
23	RELAY F-B	O	FRONT B RELAY

Pin No.	Pin Name	I/O	Function
24	RELAY F-A	O	FRONT A RELAY
25	RELAY SURR	O	SURROUND RELAY
26	RELAY CNT	O	CENTER RELAY
27	RELAY H/P	O	H/P RELAY
28	FUNC UP	I	ENCODER INPUT(FUNCTION)
29	H/P DETECT	I	H/P DETECT
30	FUNC DOWN	I	ENCODER INPUT(FUNCTION)
31	NC	—	
32	CNT MUTE	O	CENTER MUTE
33	FRONT MUTE	O	FRONT MUTE
34	SURR MUTE	O	SURROUND MUTE
35	NC	—	
36	NC	—	
37	NC	—	
38	FL DRV RESET	O	LC75721NE RESET
39	RELAY POWER	O	POWER RELAY
40	RESET	I	RESET
41	GND	I	
42	XTAL	—	
43	EXTAL	—	
44	FL DRV CE	O	LC75721NE CE
45	FL DRV DATA	O	LC75721NE DATA
46	FL DRV/2090 CLK	O	CONTROL CLOCK
47	2090 DATA	O	BU2090F DATA
48	VOL DOWN	I	ENCODER INPUT(VOLUME)
49	VOL UP	I	ENCODER INPUT(VOLUME)
50	SEL DOWN	I	ENCODER INPUT(SELECT)
51	SEL UP	I	ENCODER INPUT(SELECT)
52	AVSS	—	
53	VREF	—	
54	AVDD	—	
55	NC	—	
56	GND	—	
57	STEP OPT	I	AREA SELECT
58	SET OPT	I	MODEL SELECT
59	GND	—	
60	KEY IN3	I	KEY INPUT
61	KEY IN2	I	KEY INPUT
62	KEY IN1	I	KEY INPUT
63	9K/10K STEP	I	TUNER STEP SELECT
64	PROTECT	I	PROTECTION
65	89057 INT	I	LC89057 INTERUPT
66	M32 SCLK	O	MELODY32 CLOCK
67	1837 CE	O	CODEC CE
68	M32 RESET	O	MELODY32 RESET
69	NC	—	
70	NC	—	
71	NC	—	
72	NC	—	
73	NC	—	
74	NC	—	
75	NC	—	
76	NC	—	

Pin No.	Pin Name	I/O	Function
77	PWR DOWN	I	POWER DOWN DETECT
78	RDS CLK	O	TDA7330 CONTROL CLOCK
79	RDS DATA	O	TDA7330 CONTROL DATA
80	NC	—	
81	VIDEO MUTE	O	VIDEO MUTE
82	M32 INTREQ	I/O	MELODY32 CONTROL
83	VIDEO SEL1	O	VIDEO SELECT1
84	VIDEO SEL2	O	VIDEO SELECT2
85	REMOCON	I	REMOTE CONTROL SIGNAL INPUT
86	GND	—	
87	GND	—	
88	VSS	—	
89	VDD	—	
90	NC	—	
91	NC	—	
92	PLL DATA	O	PLL CONTROL
93	PLL CLK	O	PLL CONTROL
94	PLL DT IN	O	PLL CONTROL
95	TU MUTE	O	TUNER MUTE
96	STEREO	I	STEREO DETECT
97	TUNED	I	TUNED DETECT
98	PLL CE	O	PLL CONTROL
99	NC	—	
100	NC	—	

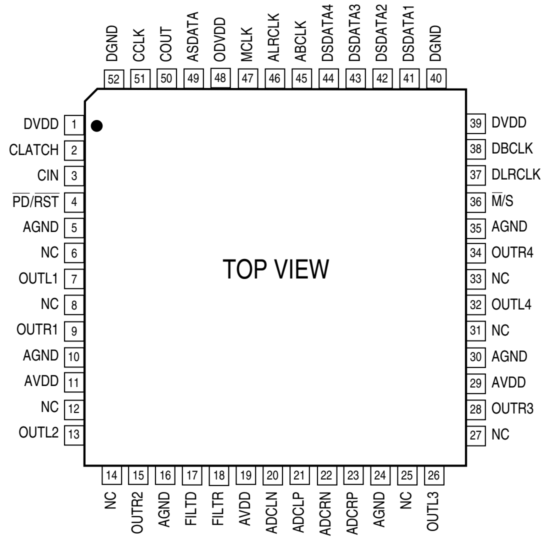
MELODY32 (IC802)

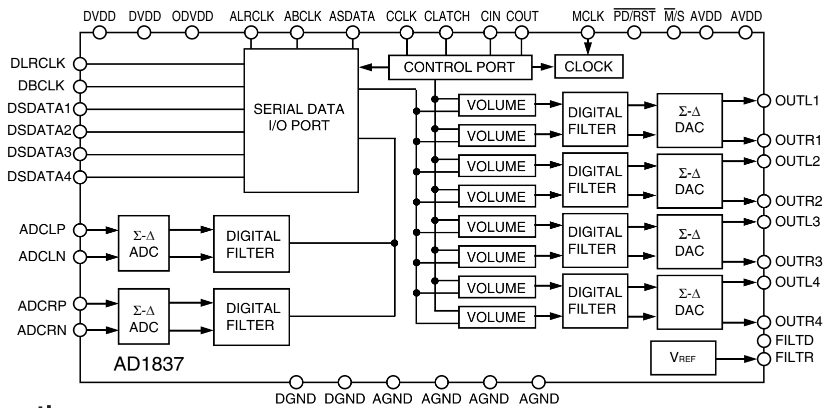


MELODY32 Terminal Function

Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name	Pin No.	Pin Name
1	D14	25	VDDEXT	49	DR2	73	$\overline{\text{RESET}}$	97	A11	121	$\overline{\text{WR}}$
2	D15	26	HACK	50	RCLK2	74	TDO	98	A12	122	$\overline{\text{RD}}$
3	HAD0	27	$\overline{\text{HCMS}}$	51	RFS2	75	TDI	99	A13	123	D0
4	HAD1	28	$\overline{\text{HCIOMS}}$	52	RXD	76	TMS	100	VDDEXT	124	D1
5	GND	29	GND	53	TXD	77	GND	101	A14	125	D2
6	HAD2	30	HALE	54	GND	78	TCK	102	A15	126	D3
7	HAD3	31	$\overline{\text{HRD}}$	55	GND	79	$\overline{\text{TRST}}$	103	A16	127	VDDINT
8	HAD4	32	$\overline{\text{HWR}}$	56	DT0	80	GND	104	A17	128	D4
9	HAD5	33	GND	57	TCLK0	81	$\overline{\text{EMU}}$	105	GND	129	GND
10	HAD6	34	PF0	58	VDDINT	82	VDDINT	106	A18	130	CLKOUT
11	HAD7	35	PF1	59	TF50	83	OPMODE	107	A19	131	VDDEXT
12	HAD8	36	PF2	60	DR0	84	A0	108	A20	132	CLKIN
13	VDDEXT	37	PF3	61	RCLK0	85	A1	109	A21	133	XTAL
14	HAD9	38	PF4	62	RFS0	86	A2	110	$\overline{\text{BGH}}$	134	GND
15	HAD10	39	PF5	63	VDDEXT	87	A3	111	$\overline{\text{BG}}$	135	D5
16	GND	40	VDDEXT	64	DT1	88	A4	112	$\overline{\text{BR}}$	136	D6
17	HAD11	41	PF6	65	TCLK1	89	A5	113	$\overline{\text{BMS}}$	137	D7
18	HAD12	42	PF7	66	TFS1	90	VDDEXT	114	$\overline{\text{IOMS}}$	138	D8
19	VDDINT	43	TMR0	67	DR1	91	A6	115	$\overline{\text{MS0}}$	139	D9
20	HAD13	44	TMR1	68	RCLK1	92	A7	116	$\overline{\text{MS1}}$	140	D10
21	HAD14	45	TMR2	69	RFS1	93	A8	117	$\overline{\text{MS2}}$	141	D11
22	HAD15	46	DT2	70	BMODE0	94	GND	118	VDDEXT	142	D12
23	HA16	47	TCLK2	71	BMODE1	95	A9	119	$\overline{\text{MS3}}$	143	VDDEXT
24	HACK_P	48	TFS2	72	BYPASS	96	A10	120	ACK	144	D13

AD1837 (IC808)

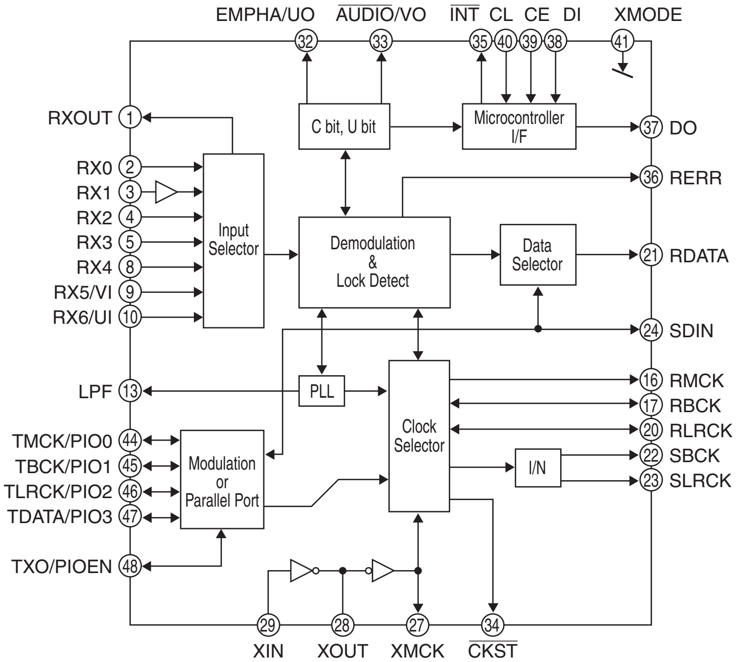


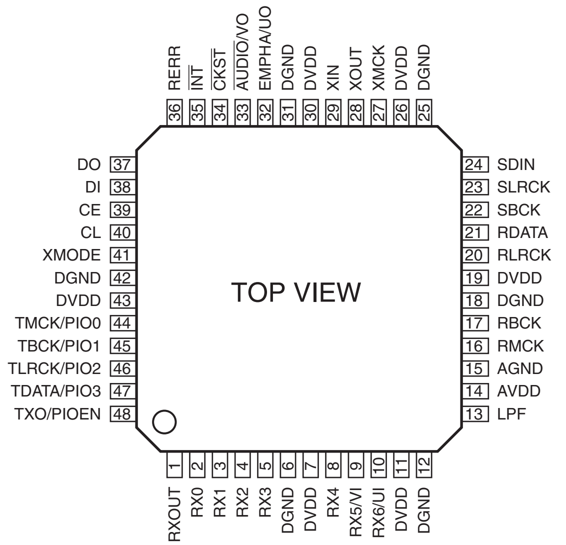


AD1837 Terminal Function

Pin No.	Pin Name	Input/ Output	Description
1,39	DVDD		Digital Power Supply. Connect to digital 5V supply.
2	CLATCH	I	Latch Input for Control Data
33	CIN	I	Serial Control Input
4	PD/RST	I	Power-Down/Reset
5,10,16,24,30,35	AGND		Analog Ground
6,12,25,31	NC		Not connected
7,13,26,32	OUTLx	O	DACx Left Channel Output
8,14,27,33	NC		Not connected
9,15,28,34	OUTRx	O	DACx Right Channel Output
11,19,29	AVDD		Analog Power Supply. Connect to analog 5V supply.
17	FILTD		Filter Capacitor Connection. Recommend 10µF/100nF.
18	FILTR		Reference Filter Capacitor Connection. Recommended 10µF/100nF.
20	ADCLN	I	ADC Left Channel Negative Input
21	ADCLP	I	ADC Left Channel Positive Input
22	ADCRN	I	ADC Right Channel Negative Input
23	ADCRP	I	ADC Right Channel Positive Input
36	M/S	I	ADC Master/Slave Select
37	DLRCLK	I/O	DAC LR Clock
38	DBCLK	I/O	DAC Bit Clock
40,52	DGND		Digital Ground
41-44	DSDATAx	I	DACx Input Data (Left and Right Supply)
45	ABCLK	I/O	ADC Bit Clock
46	ALRCLK	I/O	ADC LR Clock
47	MCLK	I	Master Clock Input
48	ADVDD		Digital Output Driver Power Supply
49	ASDATA	O	ADC Serial Data Output
50	COUT	O	Output for Control Data
51	CCLK	I	Control Clock Input for Control Data

LC89057W (IC807)





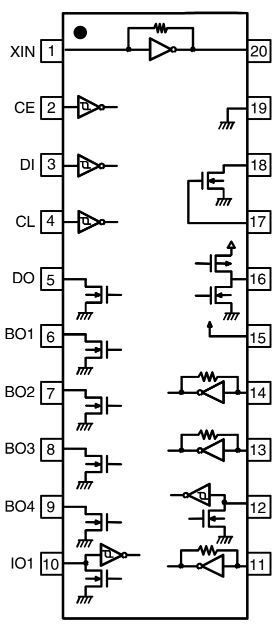
LC89057W Terminal Function

Pin No.	Pin Name	I/O	Function
1	RXOUT	O	Input bi-phase select data output terminal
2	RX0	I_5	TTL compatible digital data input terminal
3	RX1	I	Coaxial compatible amp built-in digital data input terminal
4	RX2	I_5	TTL compatible digital data input terminal
5	RX3	I_5	TTL compatible digital data input terminal
6	DGND	—	Digital GND
7	DVDD	—	Digital power
8	RX4	I_5	TTL compatible digital data input terminal
9	RX5/VI	I_5	TTL compatible digital data/Validity flag input terminal for modulation
10	RX6/UI	I_5	TTL compatible digital data/User data input terminal for modulation
11	DVDD	—	Digital power for PLL
12	DGND	—	Digital GND for PLL
13	LPF	O	PLL loop filter connecting terminal
14	AVDD	—	Analog power for PLL
15	AGND	—	Analog GND for PLL
16	RMCK	O	RMCK clock output terminal (256fs, 512fs, XIN, VCO)
17	RBCK	O/I	RBCK clock in/output terminal (64fs)
18	DGND	—	Digital GND
19	DVDD	—	Digital power
20	RLRCK	O/I	RLRCK clock in/output terminal (fs)
21	RDATA	O	Serial audio data output terminal
22	SBCK	O	SBCK clock output terminal (32fs, 64fs, 128fs)
23	SLRCK	O	SLRCK clock output terminal (fs/2, fs, 2fs)
24	SDIN	I_5	Serial audio data input terminal
25	DGND	—	Digital GND
26	DVDD	—	Digital power
27	XMCK	O	Osc. amp output terminal

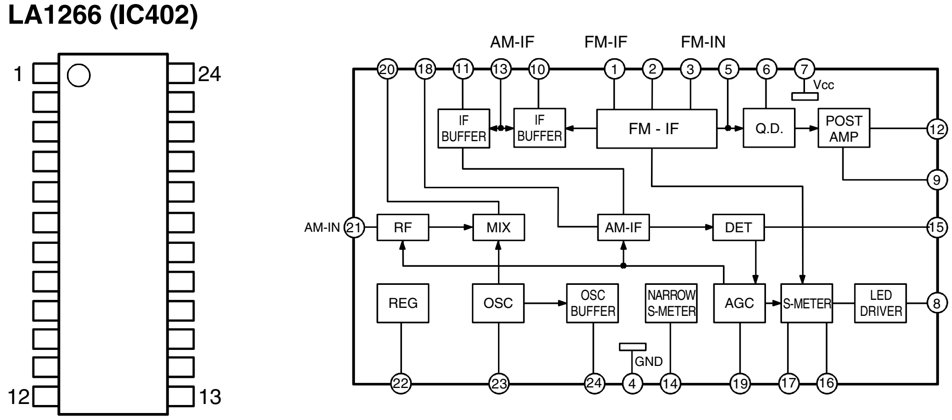
Pin No.	Pin Name	I/O	Function
28	XOUT	O	X'tal osc. connecting output terminal
29	XIN	I	X'tal osc. connection, external clock input terminal (24.576MHz or 12.288MHz)
30	DVDD	—	Digital power
31	DGND	—	Digital GND
32	EMPHA/UO	I/O	Emphasis information/U-data output/Chip address setting terminal
33	AUDIO/VO	I/O	Non-PCM detect/V-flag output/ Chip address setting terminal
34	CKST	I/O	Clock switch transition period output/Demodulation master or slave function switching terminal
35	INT	I/O	Interrupt output for µcom (Interrupt factor selectable)/Modulation or general I/O switching terminal
36	RERR	O	PLL lock error, data error flag output
37	DO	O	µcom I/F, read out data output terminal (3-state)
38	DI	I5	µcom I/F, write data input terminal
39	CE	I5	µcom I/F, chip enable input terminal
40	CL	I5	µcom I/F, clock input terminal
41	XMODE	I5	System reset input terminal
42	DGND	—	Digital GND
43	DVDD	—	Digital power
44	TMCK/PIO0	I/O	256fs system clock input for modulation/General I/O in/output terminal
45	TBCK/PIO1	I/O	64fs bit clock input for modulation/General I/O in/output terminal
46	TLRCK/PIO2	I/O	fs clock input for modulation/General I/O in/output terminal
47	TDATA/PIO3	I/O	Serial audio data input for modulation/General I/O in/output terminal
48	TXO/PIOEN	O/I	Modulation data output/ General I/O enable input terminal

* For latch-up countermeasure, perform each power supply ON/OFF in the same timing.

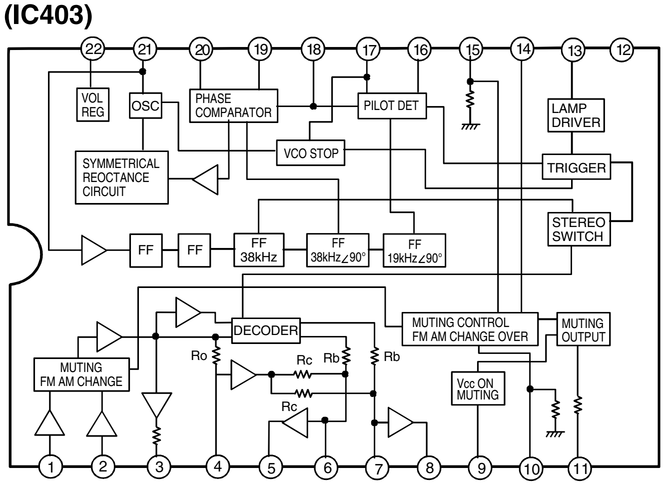
LC72131 (IC401)



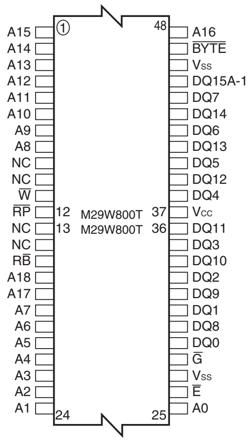
LA1266 (IC402)

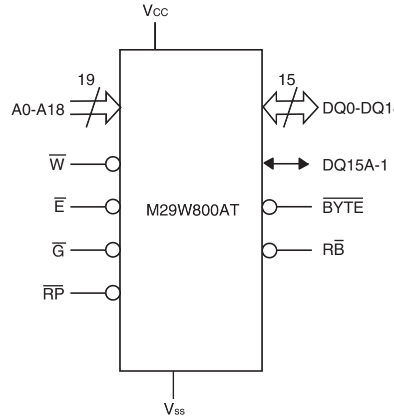


LA3401 (IC403)



M29W800AT (IC805)

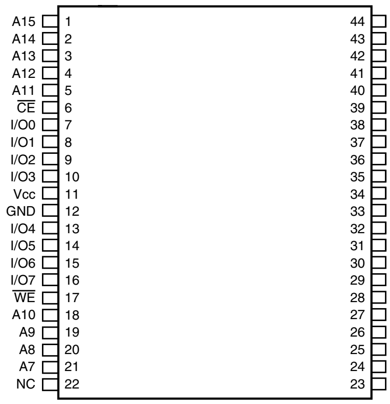


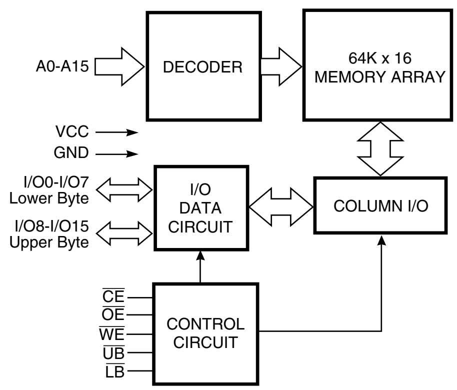


PIN DESCRIPTION

Symbol	Pin Name
A0-A18	Address Inputs
DQ0-DQ7	Data Input/Outputs, Command Inputs
DQ8-DQ14	Data Input/Outputs
DQ15A-1	Data Input/Output or Address Input
E	Chip Enable
G	Output Enable
W	Write Enable
RP	Reset/Block Temporary Unprotect
RB	Ready/Busy Output
BYTE	Byte/Word Organization
VCC	Supply Voltage
VSS	Ground
NC	No Connected Internally
DU	Don't Use as Internally Connected

IS61LV6416 (IC806)

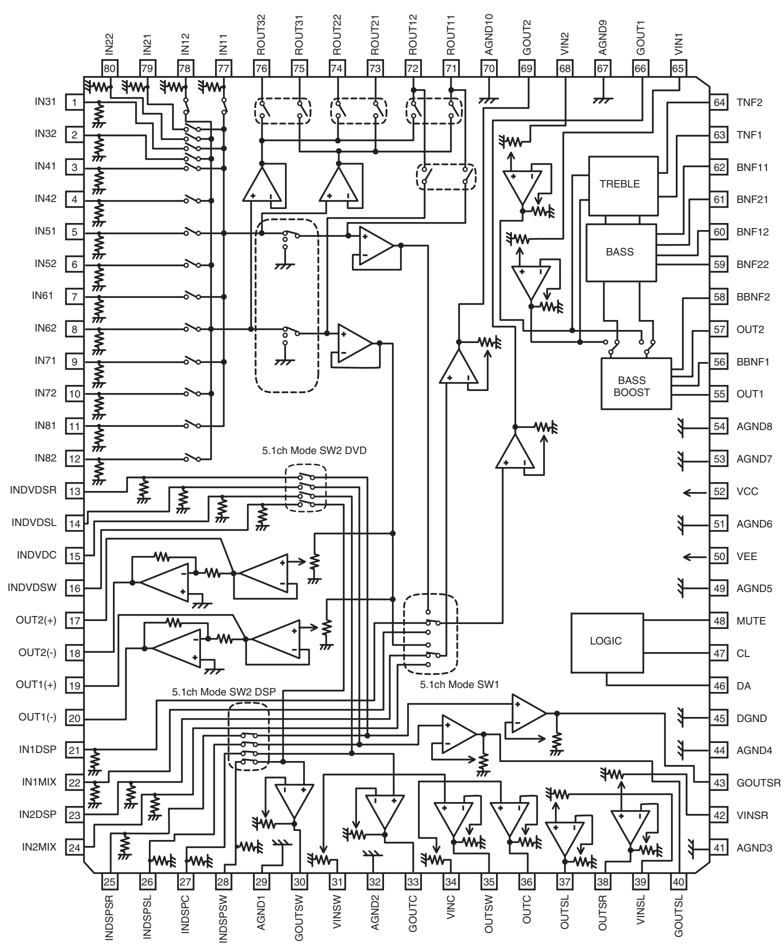




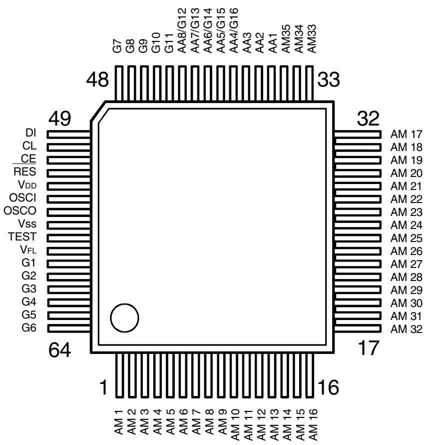
PIN DESCRIPTION

Symbol	Pin Name
A0-A15	Address inputs
I/O0-I/O15	Data Inputs/Outputs
CE	Chip Enable Input
OE	Output Enable Input
WE	Write Enable Input
LB	Lower-byte Control (I/O0-I/O7)
UB	Upper-byte Control (I/O8-I/O15)
NC	No Connection
VCC	Power
GND	Ground

BD3811K1 (IC701)



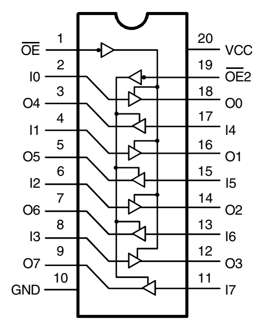
LC75721E (IC301)



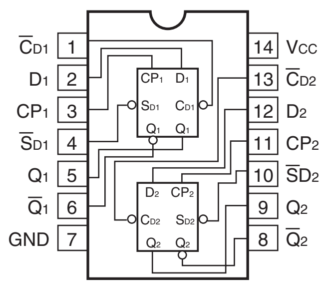
● LC75721E Terminal Function

Symbol	Function
V_{DD}	Power terminal +5V
V_{SS}	Power terminal GND
V_{FL}	Power terminal FL drive
DI CL CE	Serial data transfer terminal DI: Data CL: Clock CE: Chip enable
OSCI OSCO	External CR connecting terminal
$\overline{RES}$	System reset terminal
AM1~AM35 AA1~AA3	Anode output terminal
AA4/G16 AA5/G15 AA6/G14 AA7/G13 AA8/G12	Anode/Grid output terminal
G1~G11	Grid output terminal
TEST	LSI test terminal

MM74LCX244 (IC809~811)



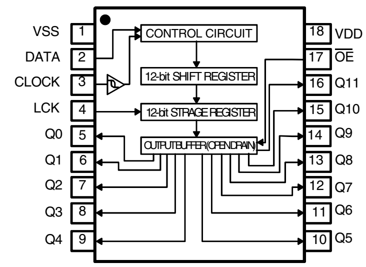
74LCX74 (IC821)



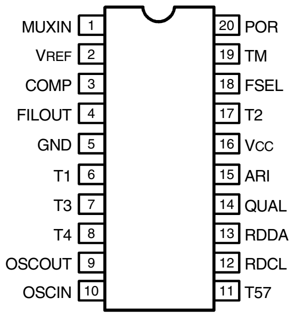
● Pin Descriptions

Pin Names	Description
D_1, D_2	Data Inputs
CP_1, CP_2	Clock Pulse Inputs
$\overline{CD}_1$, $\overline{CD}_2$	Direct Clear Inputs
$\overline{SD}_1$, $\overline{SD}_2$	Direct Set Inputs
Q_1, $\overline{Q}_1$, Q_2, $\overline{Q}_2$	Outputs

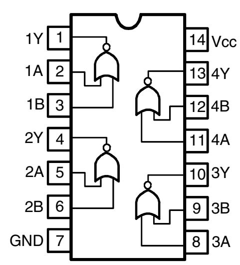
BU2090F (IC302)



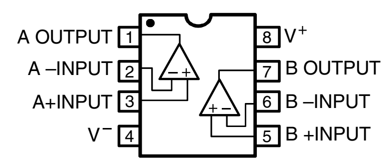
TDA7330BD (IC202)



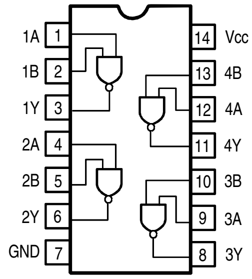
MM74LCX02 (IC813)



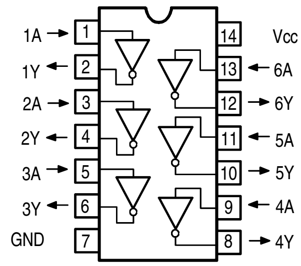
NJM2068MD (IC815~820,721,761,762, 763,781,782,783,817,818,819) BA4510F (IC815,816)



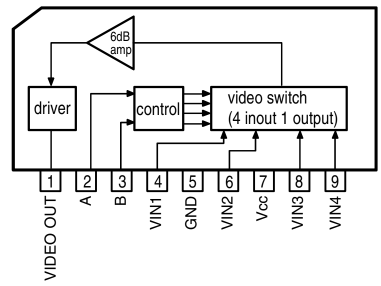
SN74LV00APW (IC814)



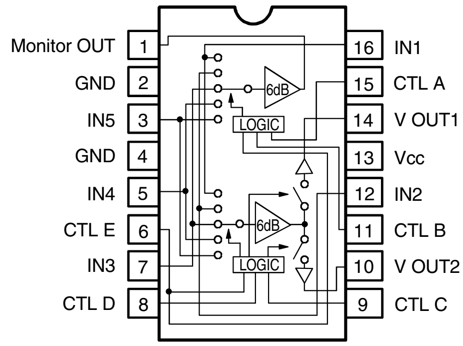
74HCU04 (IC803)



LA7952 (IC601,621,622)



BA7625 (IC651)
BA7626 (IC652,653)



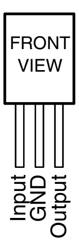
A	B	E	MONITOR OUT
L	L	*	IN 1
H	L	*	IN 2
L	H	*	IN 3
H	H	L	IN 4
H	H	H	IN 5

C	D	E	V OUT 1
L	L	*	—
H	L	*	IN 2
L	H	*	IN 3
H	H	L	IN 4
H	H	H	IN 5

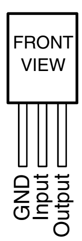
C	D	E	V OUT 2
L	L	*	IN 1
H	L	*	—
L	H	*	IN 3
H	H	L	IN 4
H	H	H	IN 5

Note 1: * mark means that feasible for either H or L.
Note 2: Each input terminal is provided with sink chip clamp (BA7625).
Each input terminal takes 20kohm at the end (BA7626).

KIA7806AP (IC602)
KIA7805AP (IC104,103,822)
KIA7815AP (IC101)
KIA7812AP (IC271)

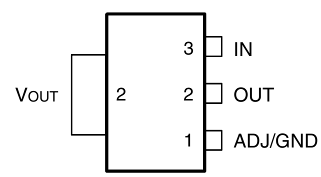


KIA7915PI (IC102)

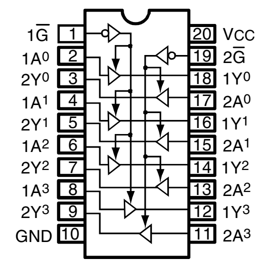


RC1117S25T (IC824)
RC1117S33ST (IC823)

FRONT VIEW

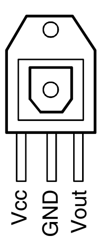


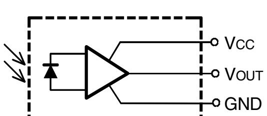
MM74HCT244 (IC812)



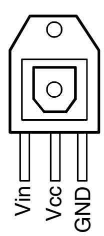
● OPTICAL

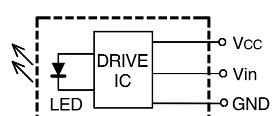
INPUT
GP1FA502RZ (IC801~803)





OUTPUT
GP1FA502TZ(IC817)

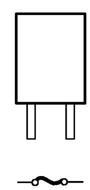




● IC PROTECTOR

ICP-N15 (IC105)

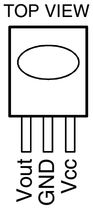
FRONT VIEW

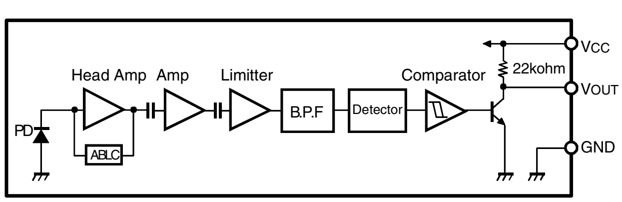


● IR SENSOR

NJL64H380A(RMC301)

TOP VIEW

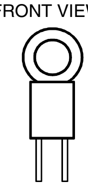




● POSISTOR

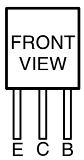
P43T7D330BW16

FRONT VIEW

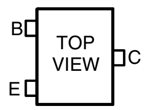


● TRANSISTORS

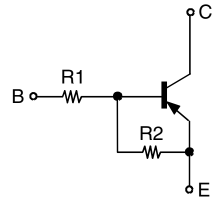
DTA114ES
DTC114TS
DTC114YS
DTC144ES



DTA114EK
DTA114YK
DTA144EK
DTC114EK
DTC114YK
DTC144EK

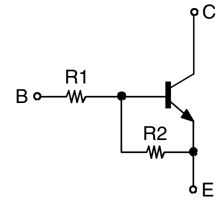


DTA Series



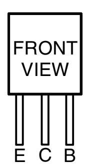
	R1	R2
DTA114EK	10kohm /Ω	10kohm /Ω
DTA114ES	10kohm /Ω	10kohm /Ω
DTA114YK	10kohm /Ω	47kohm /Ω
DTA144EK	47kohm /Ω	47kohm /Ω

DTC Series

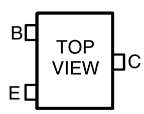


	R1	R2
DTC114EK	10kohm /Ω	10kohm /Ω
DTC114TS	10kohm /Ω	—
DTC114YK	10kohm /Ω	47kohm /Ω
DTC114YS	10kohm /Ω	47kohm /Ω
DTC144EK	47kohm /Ω	47kohm /Ω
DTC144ES	47kohm /Ω	47kohm /Ω

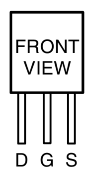
2SC1740S
2SC3199Y
KSA916Y
KSA992F
KSC1845F
KTA1266Y
KTA1268BL
KTC2874B
KTC3198Y
KTC3200BL



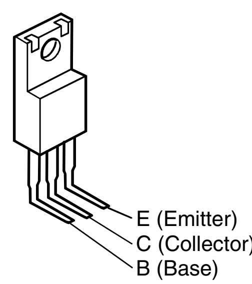
2SC2412K
KTC3880S



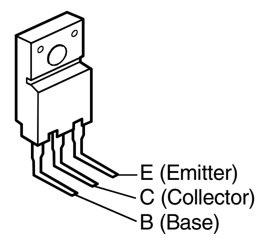
2SK117



2SD947F

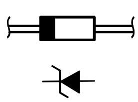


2SD3290Y
2SB1560Y

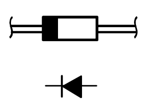


● DIODES (LED included)

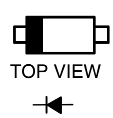
MTZJ3.3B
MTZJ5.1B
MTZJ6.8B
MTZJ7.5A
MTZJ8.2B
MTZJ11B
MTZJ18B
MTZJ20B



1N4007
1SS133

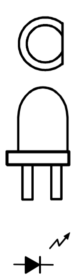


KDS160



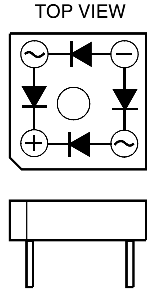
HL-50RDRF4T

TOP VIEW



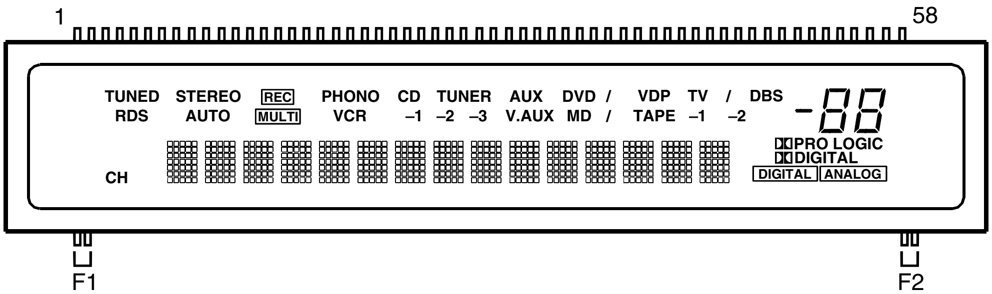
KBPC604

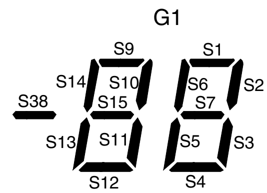
TOP VIEW

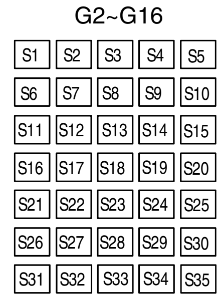


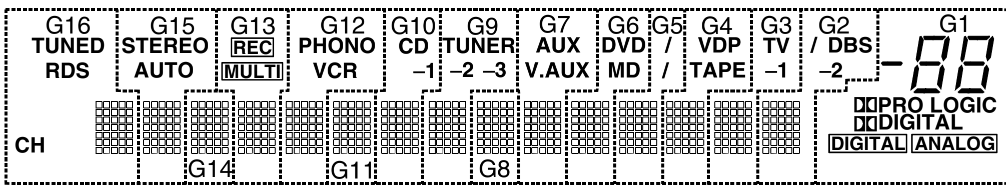
● FL DISPLAY

16-st-42GNK (FL301)









Pin Assignment

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CONNECTION	F1	F1	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18
PIN NO.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CONNECTION	S19	S20	S21	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33	S34	S35	S36	S37	S38
PIN NO.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58		
CONNECTION	G16	G15	G14	G13	G12	G11	G10	G9	G8	G7	G6	G5	G4	G3	G2	G1	F2	F2		

F1, F2 : Filament
G1~G16: Grid
S1~S38 : Anode

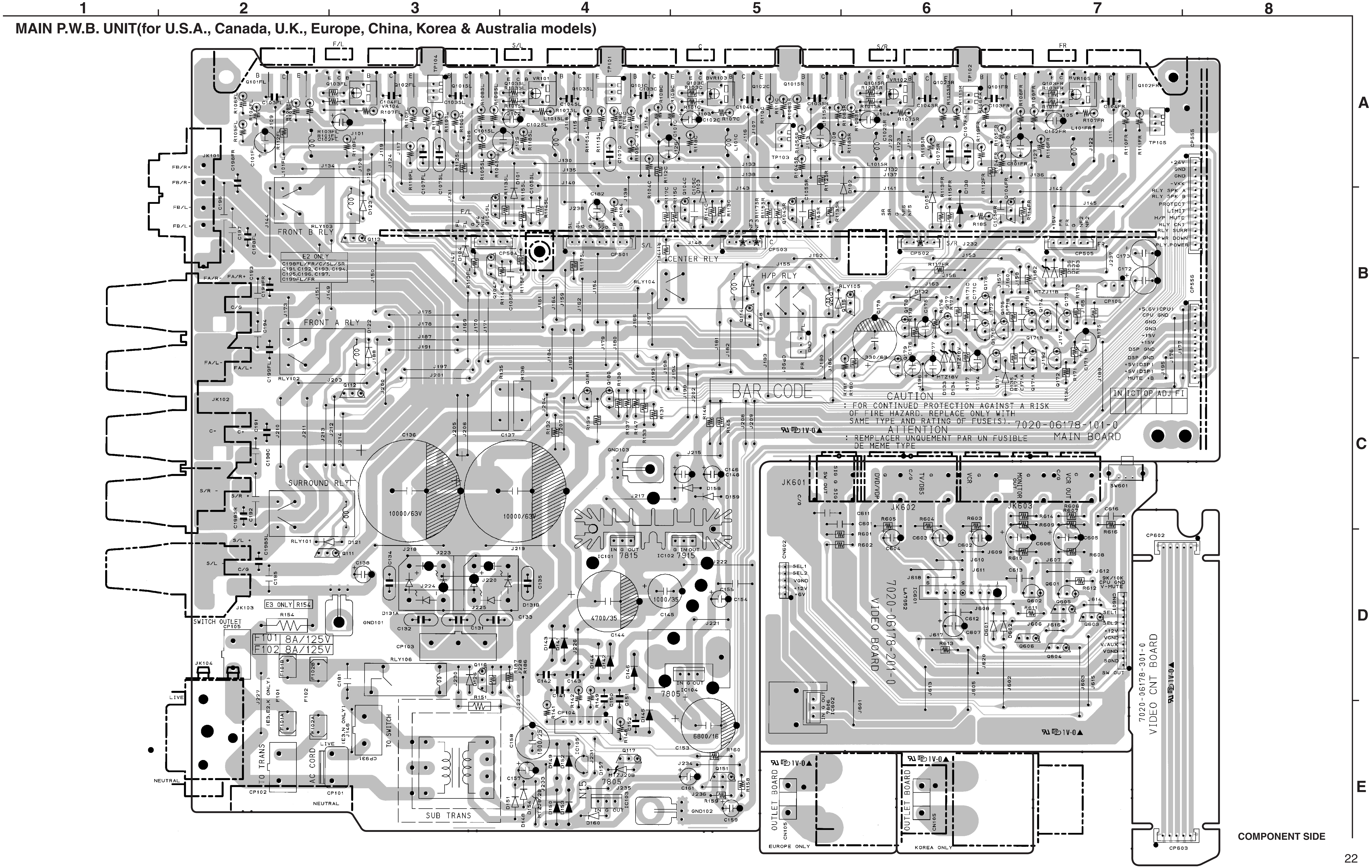
Anode & Grid Assignment

	G1	G2~G16		G1	G2~G16		G1	G2~G16		G1	G2~G16
S1	S1	S1	S10	S10	S10	S19	—	S19	S28	—	S28
S2	S2	S2	S11	S11	S11	S20	—	S20	S29	—	S29
S3	S3	S3	S12	S12	S12	S21	—	S21	S30	—	S30
S4	S4	S4	S13	S13	S13	S22	—	S22	S31	—	S31
S5	S5	S5	S14	S14	S14	S23	—	S23	S32	—	S32
S6	S6	S6	S15	S15	S15	S24	—	S24	S33	—	S33
S7	S7	S7	S16	—	S16	S25	—	S25	S34	—	S34
S8	—	S8	S17	DIGITAL	S17	S26	—	S26	S35	—	S35
S9	S9	S9	S18	PRO LOGIC	S18	S27	—	S27			

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12	G13	G14	G15	G16
S36	DIGITAL	/	TV	VDP	/(DVD)	DVD	AUX	—	TUNER	CD	—	PHONO	REC	—	STEREO	TUNED
S37	ANALOG	–2	–1	TAPE	/(MD)	MD	V.AUX	—	–2	–1	—	VCR	MULTI	—	AUTO	RDS
S38	S38	DBS	—	—	—	—	—	—	–3	—	—	—	—	—	—	CH

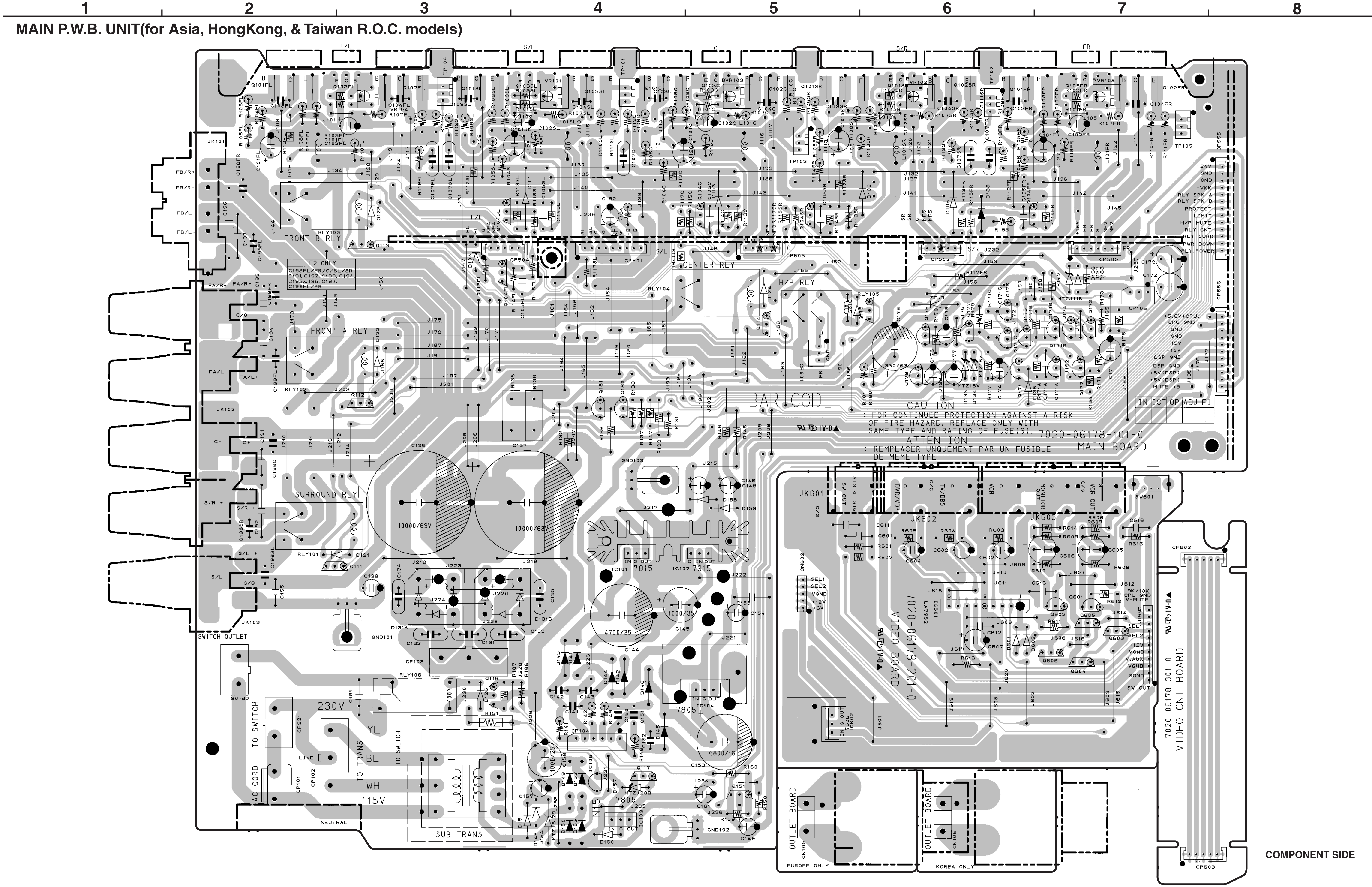
PRINTED WIRING BOARDS

MAIN P.W.B. UNIT(for U.S.A., Canada, U.K., Europe, China, Korea & Australia models)



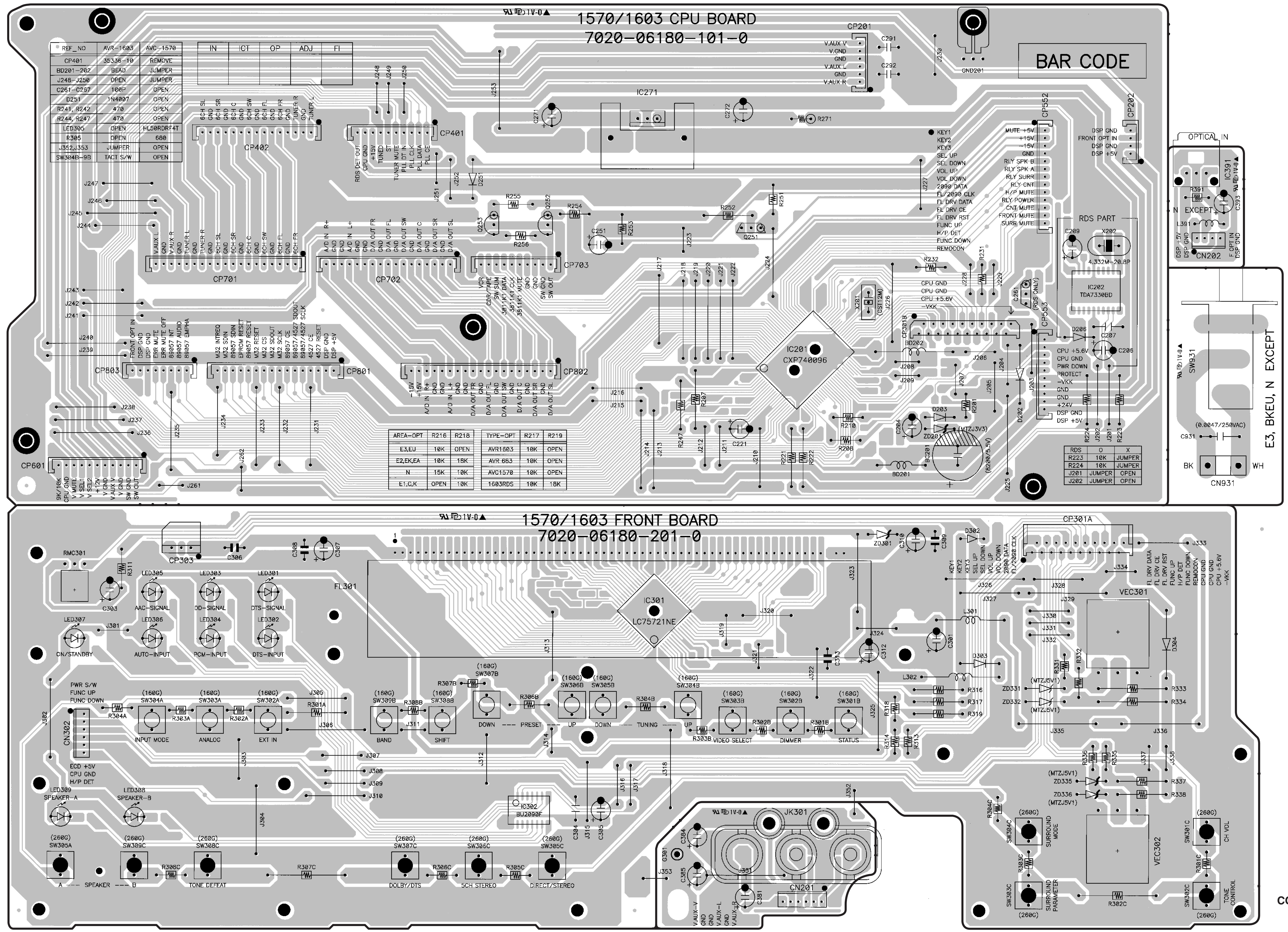
COMPONENT SIDE

MAIN P.W.B. UNIT(for Asia, HongKong, & Taiwan R.O.C. models)

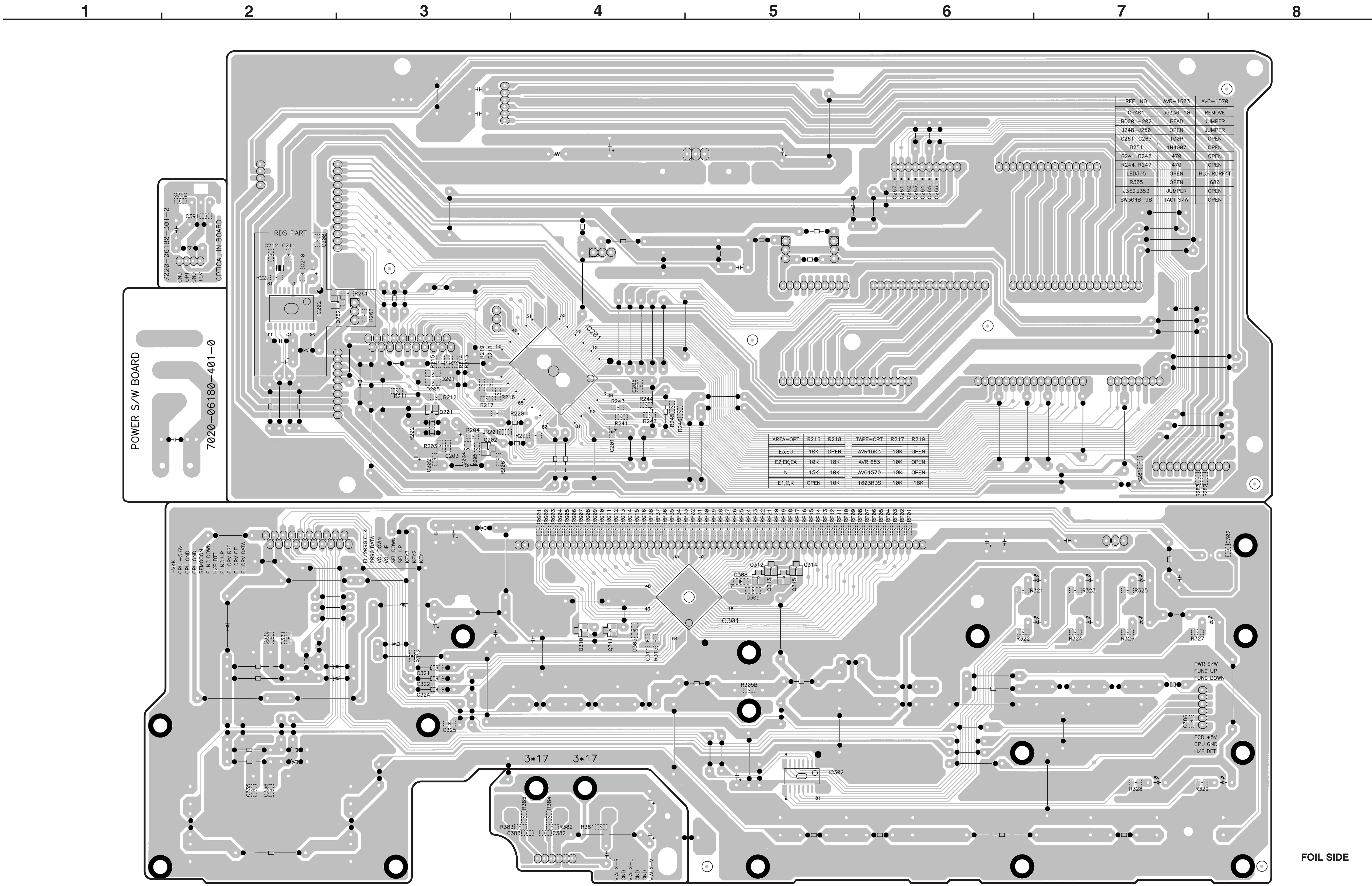


COMPONENT SIDE

CPU P.W.B. UNIT



COMPONENT SIDE



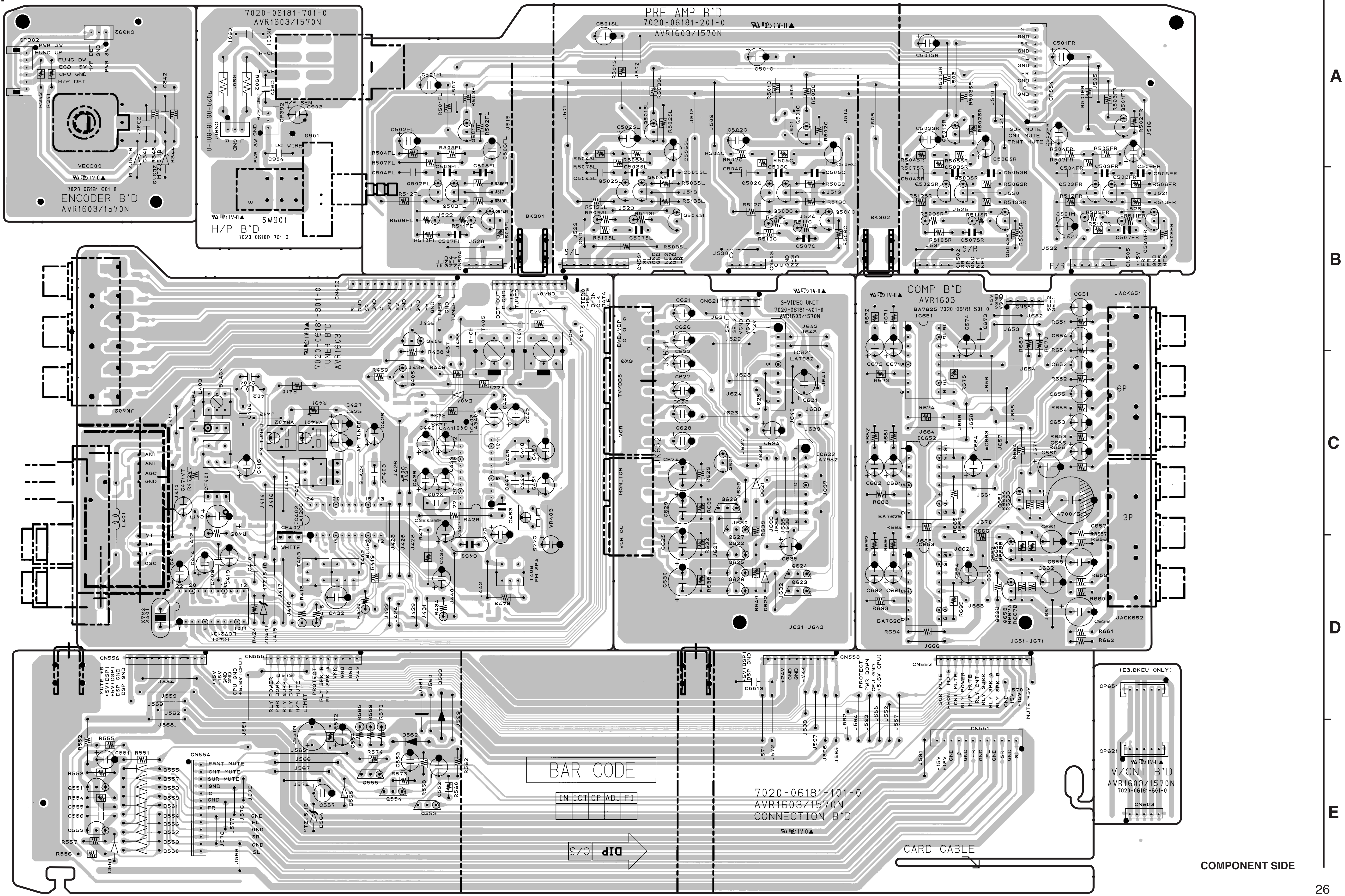
REF_NO	AVR-1603	AVC-1570
CP401	35336-10	REMOVE
BD201-202	BEAD	JUMPER
J248-J250	OPEN	JUMPER
C261-C267	100P	OPEN
D251	1N4007	OPEN
R241, R242	470	OPEN
R244, R247	470	OPEN
LED305	OPEN	HL50RDRF4T
R305	OPEN	680
J352,J353	JUMPER	OPEN
SW304B-9B	TACT S/W	OPEN

AREA-OPT	R216	R218
E3,EU	10K	OPEN
E2,EK,EA	10K	18K
N	15K	10K
E1,C,K	OPEN	10K

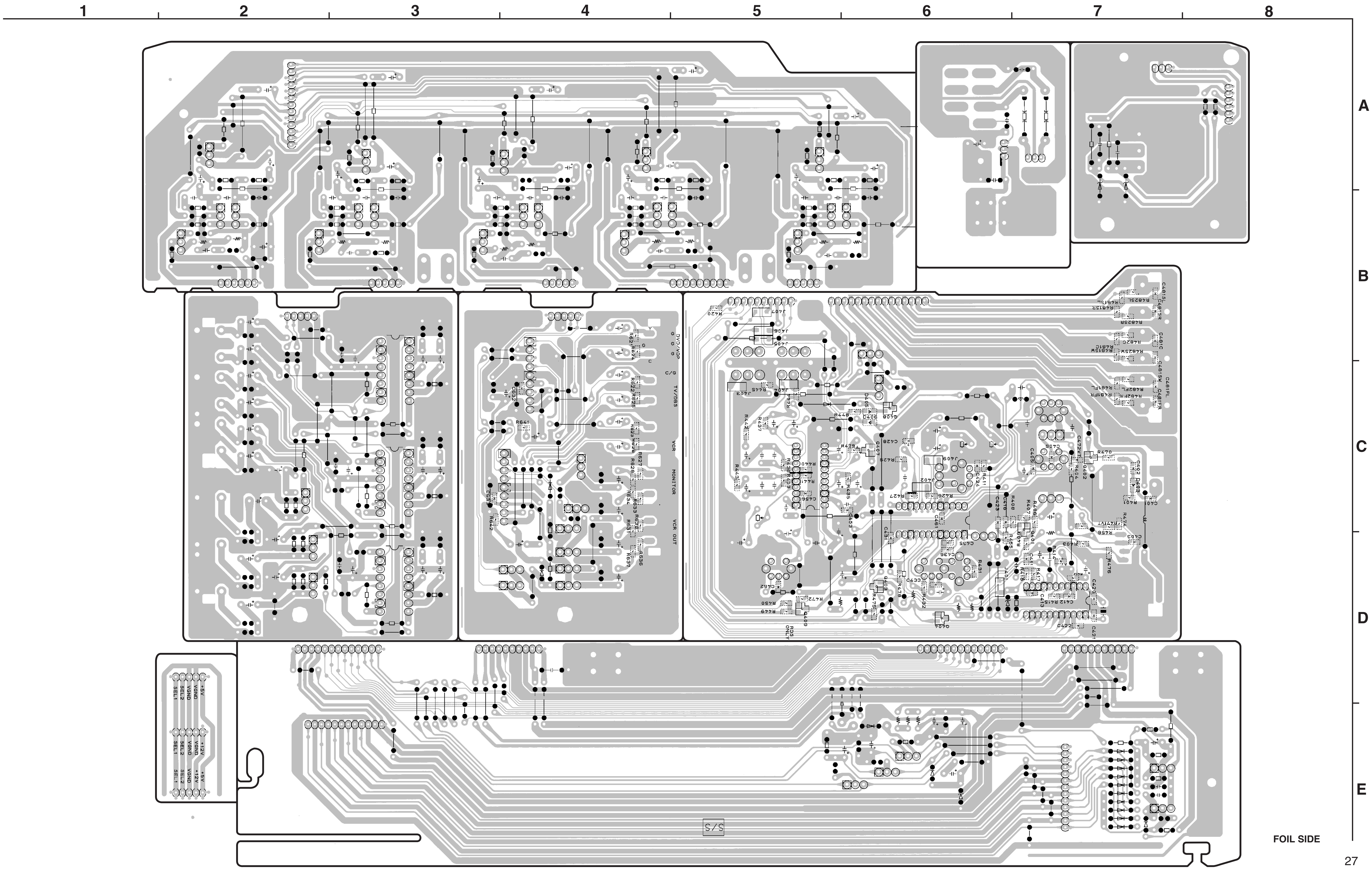
TAPE-OPT	R217	R219
AVR1603	10K	OPEN
AVR 683	10K	OPEN
AVC1570	10K	OPEN
1603RDS	10K	18K

FOIL SIDE

CNT P.W.B. UNIT



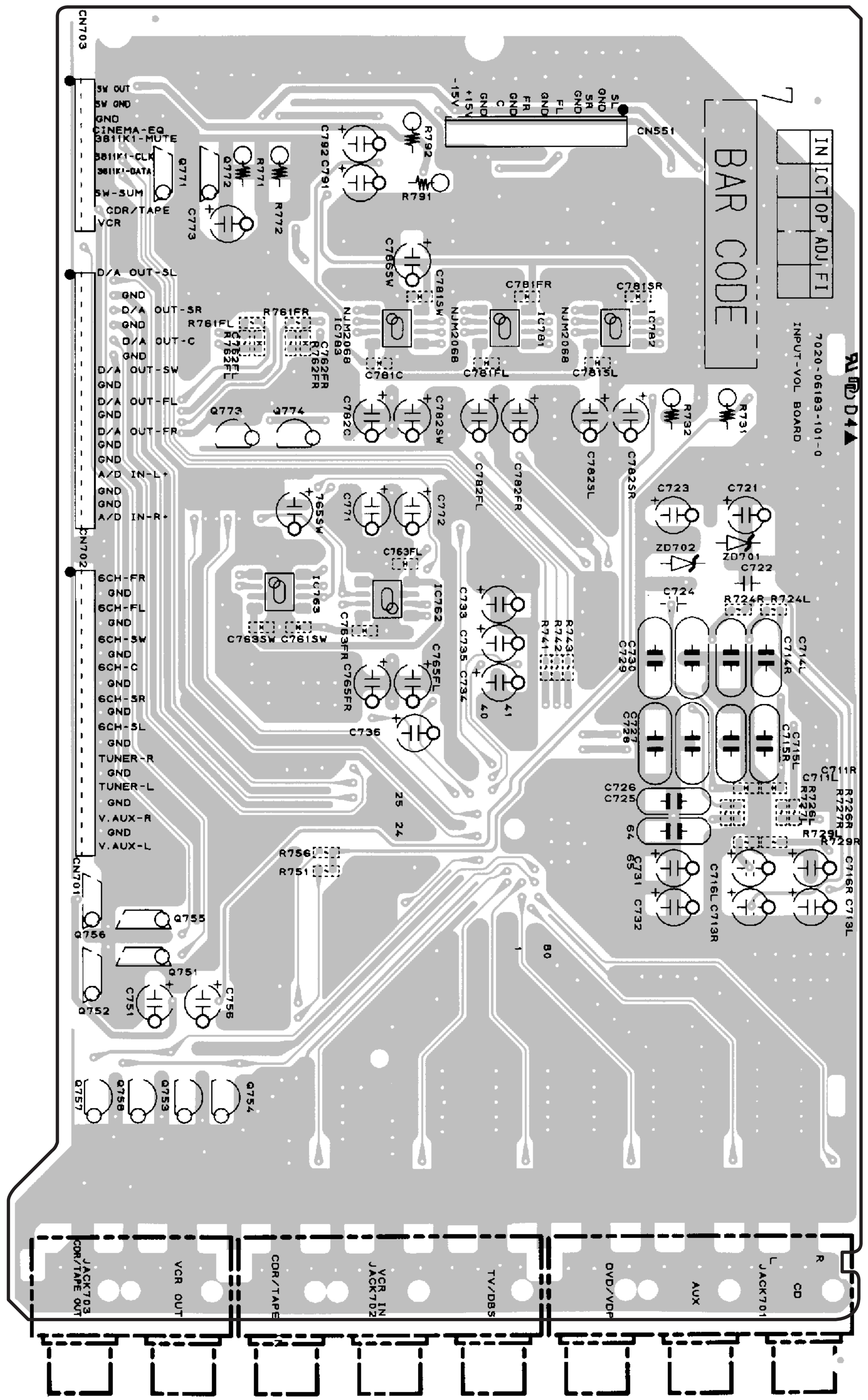
COMPONENT SIDE



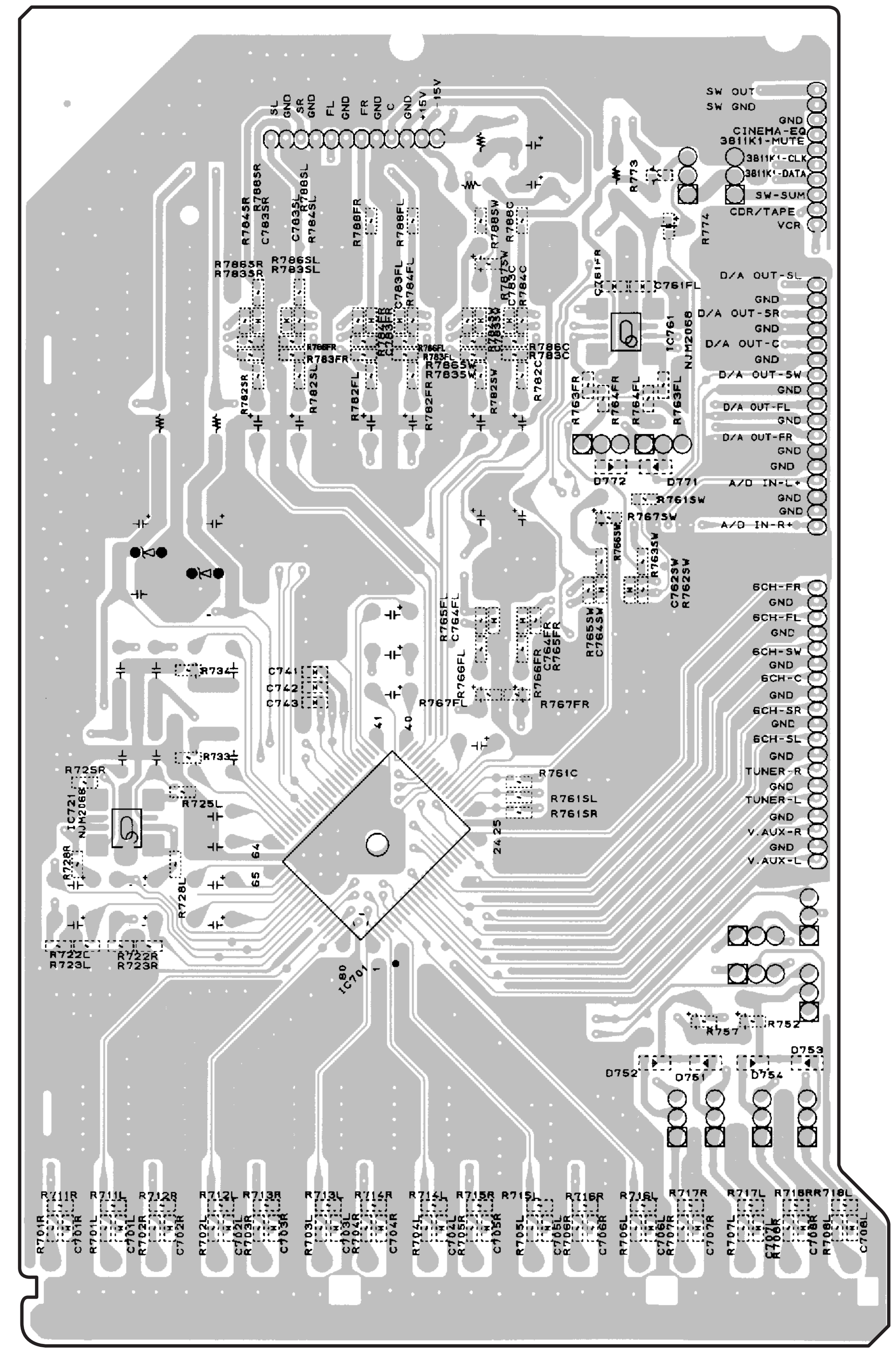
FOIL SIDE

1 2 3 4 5 6 7 8

INPUT-VOL P.W.B. UNIT



COMPONENT SIDE



FOIL SIDE

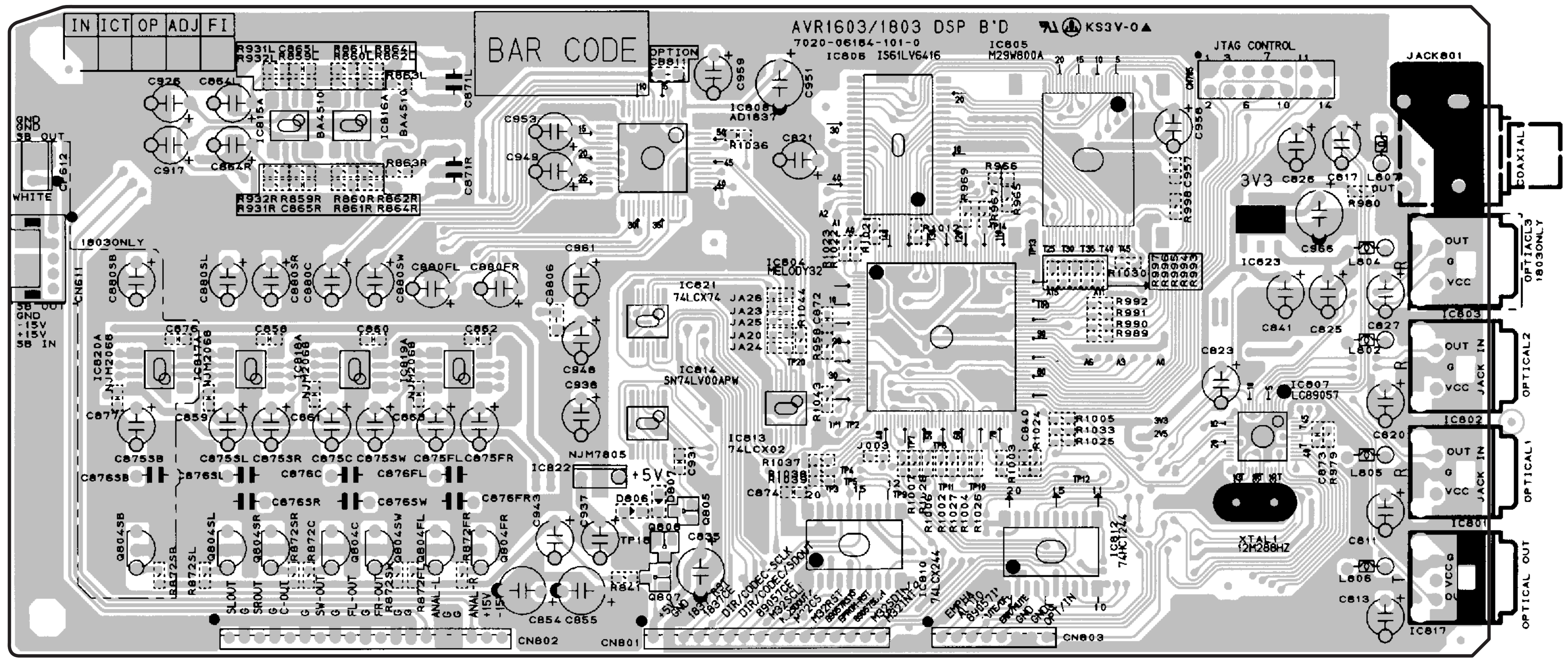
A B C D E

1 2 3 4 5 6 7 8

DSP P.W.B. UNIT

A

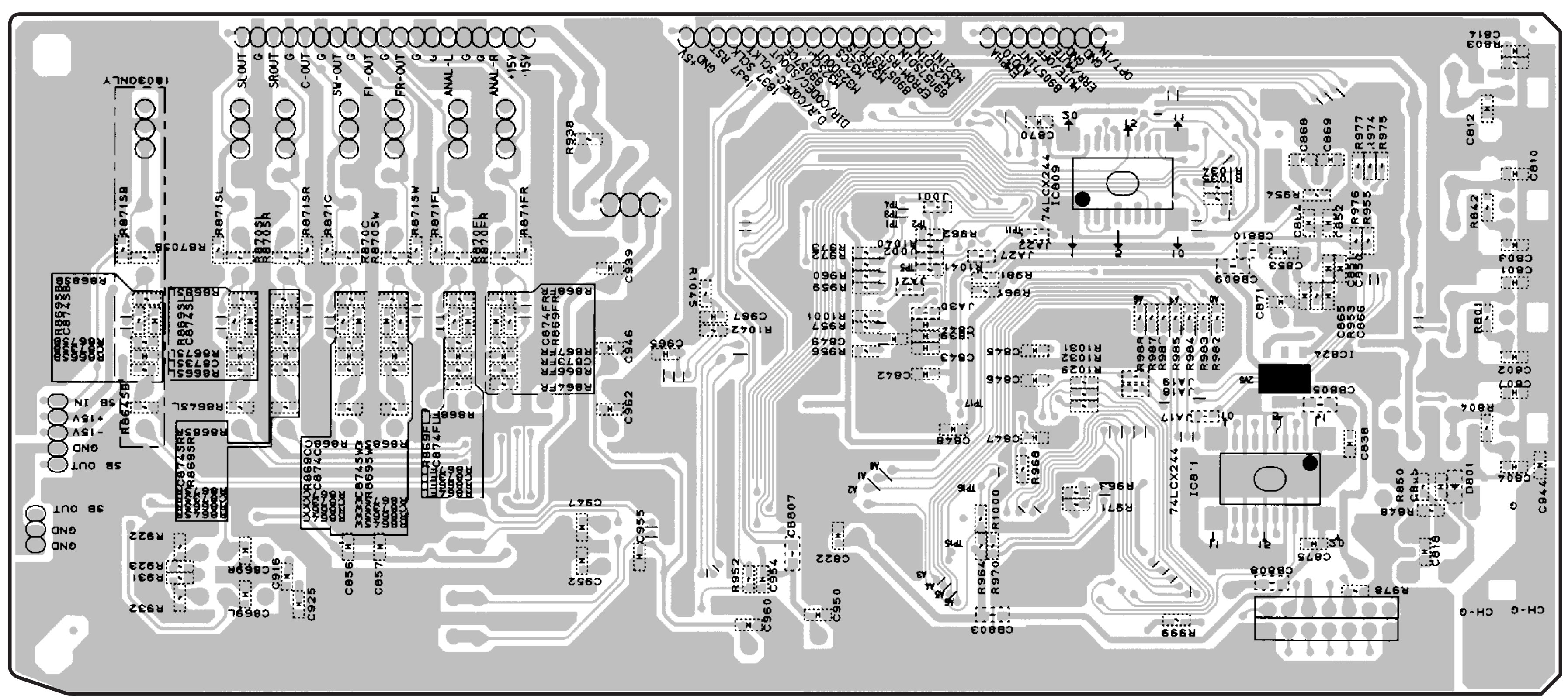
B



COMPONENT SIDE

C

D

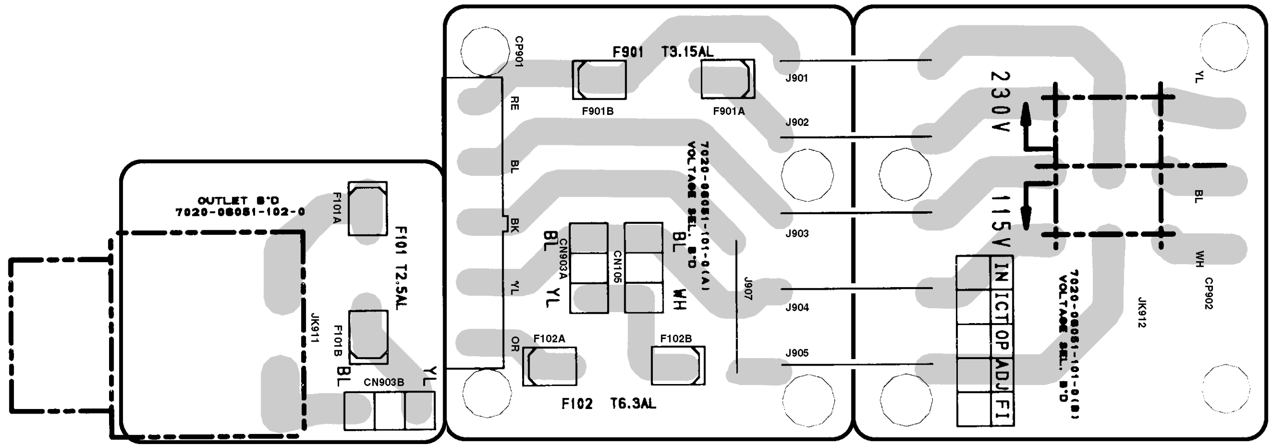


FOIL SIDE

E

1 2 3 4

VOLTAGE SEL P.W.B. UNIT



COMPONENT SIDE

A
B
C
D
E

NOTE FOR PARTS LIST

- Part indicated with the mark "⦿" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

Parts marked with this symbol ⚠ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

● Resistors

Ex.: RN 14K 2E 182 G FR

- RN — Type
- 14K — Shape and performance
- 2E — Power
- 182 — Resistance
- G — Allowable error
- FR — Others

Type	Power	Allowable error	Others
RD : Carbon	2B : 1/8W	F : ±1%	P : Pulse-resistant type
RC : Composition	2E : 1/4W	G : ±2%	NL : Low noise type
RS : Metal oxide film	2H : 1/2W	J : ±5%	NB : Non-burning type
RW : Winding	3A : 1W	K : ±10%	FR : Fuse-resistor
RN : Metal film	3D : 2W	M : ±20%	F : Lead wire forming
RK : Metal mixture	3F : 3W		
	3H : 5W		

✻ **Resistance**

1 8 2 ⇒ 1800 ohm = 1.8 kohm
- 2 — Indicates number of zeros after effective number.
- 1 8 — 2-digit effective number.

• Units: ohm

1 R 2 ⇒ 1.2 ohm
- 2 — 1-digit effective number.
- 1 R — 2-digit effective number, decimal point indicated by R.

• Units: ohm

● Capacitors

Ex.: CE 04W 1H 2R2 M BP

- CE — Type
- 04W — Shape and performance
- 1H — Dielectric strength
- 2R2 — Capacity
- M — Allowable error
- BP — Others

Type	Dielectric strength	Allowable error	Others
CE : Aluminum foil electrolytic	0J : 6.3V	F : ±1%	HS : High stability type
CA : Aluminum solid electrolytic	1A : 10V	G : ±2%	BP : Non-polar type
CS : Tantalum electrolytic	1C : 16V	J : ±5%	HR : Ripple-resistant type
CQ : Film	1E : 25V	K : ±10%	DL : For change and discharge
CK : Ceramic	1V : 35V	M : ±20%	HF : For assuring high requency
CC : Ceramic	1H : 50V	Z : +80% –20%	U : UL part
CP : Oil	2A : 100V		C : CSA part
CM : Mica	2B : 125V	P : +100% –0%	W : UL-CSA type
CF : Metallized	2C : 160V		F : Lead wire forming
CH : Metallized	2D : 200V	C : ±0.25pF	
	2E : 250V	D : ±0.5pF	
	2H : 500V	= : Others	
	2J : 630V		

✻ **Capacity (electrolyte only)**

2 2 2 ⇒ 2200μF
- 2 — Indicates number of zeros after effective number.
- 2 2 — 2-digit effective number.

• Units: μF.

2 R 2 ⇒ 2.2μF
- 2 — 1-digit effective number.
- 2 R — 2-digit effective number, decimal point indicated by R.

• Units: μF.

✻ **Capacity (except electrolyte)**

2 2 2 ⇒ 2200pF=0.0022μF
- 2 — (More than 2) — Indicates number of zeros after effective number.
- 2 2 — 2-digit effective number.

• Units: pF.

2 2 1 ⇒ 220pF
- 1 — (0 or 1) — Indicates number of zeros after effective number.
- 2 2 — 2-digit effective number.

• Units: pF.

• When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

PARTS LIST OF P.W.B. UNIT ASS'Y

MAIN P.W.B. ASS'Y

Note : The symbols in the column "Remarks" indicate the following destinations.

E3 : U.S.A. & Canada model
EU : U.S.A. model (AVR-683)
E2 : Europe model
EK : U.K. model
EA : Australia model
E1 : Asia model
E1C : China model
E1H : Hong Kong model
E1T : Taiwan R.O.C. model
E1K : Korea model

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC101	963 0057 903	IC KIA7815AP	
IC102	963 0021 502	IC KIA7915PI	
IC103	960 0159 501	IC KIA7805API	
IC104	963 0057 709	IC KIA7805AP	
IC105	960 0195 808	IC ICP-N15	
IC601	960 0180 101	IC LA7952	
IC602	960 0044 108	IC KIA7806AP	for E3
Q104C	960 0196 506	Transistor KSC1845F	
Q104FL	960 0196 506	Transistor KSC1845F	
Q104FR	960 0196 506	Transistor KSC1845F	
Q104SL	960 0196 506	Transistor KSC1845F	
Q104SR	960 0196 506	Transistor KSC1845F	
Q111	960 0196 904	Transistor DTC114YS	
Q112	960 0196 904	Transistor DTC114YS	
Q113	960 0196 904	Transistor DTC114YS	
Q114	960 0196 904	Transistor DTC114YS	
Q115	960 0196 904	Transistor DTC114YS	
Q116	960 0196 409	Transistor 2SC1740SR	
Q117	960 0196 904	Transistor DTC114YS	
Q151	960 0196 409	Transistor 2SC1740SR	
Q171	960 0005 202	Transistor KTC3198Y	
Q171A	960 0196 302	Transistor KTA1268BL	
Q171B	960 0196 302	Transistor KTA1268BL	
Q171C	960 0196 302	Transistor KTA1268BL	
Q172	960 0005 202	Transistor KTC3198Y	
Q173	960 0005 202	Transistor KTC3198Y	
Q174	960 0005 202	Transistor KTC3198Y	
Q175	960 0005 202	Transistor KTC3198Y	
Q176	960 0005 202	Transistor KTC3198Y	
Q177	960 0005 202	Transistor KTC3198Y	
Q178	960 0005 105	Transistor KTA1266Y	
Q179	960 0189 005	Transistor KSA916Y	
Q180	960 0196 302	Transistor KTA1268BL	
Q181	960 0196 302	Transistor KTA1268BL	
Q601	960 0005 202	Transistor KTC3198Y	
Q602	960 0005 202	Transistor KTC3198Y	
Q603	960 0196 904	Transistor DTC114YS	
Q604	960 0196 904	Transistor DTC114YS	
Q605	960 0196 904	Transistor DTC114YS	
Q606	960 0196 904	Transistor DTC114YS	
D101	963 0096 508	Diode 1N4148-52RE	
D102	963 0096 508	Diode 1N4148-52RE	
D103	963 0096 508	Diode 1N4148-52RE	
D104	963 0096 508	Diode 1N4148-52RE	
D105	963 0096 508	Diode 1N4148-52RE	
D121	963 0096 508	Diode 1N4148-52RE	
D122	963 0096 508	Diode 1N4148-52RE	
D123	963 0096 508	Diode 1N4148-52RE	
D124	963 0096 508	Diode 1N4148-52RE	
D125	963 0096 508	Diode 1N4148-52RE	
D126	963 0096 508	Diode 1N4148-52RE	
D131A	960 0197 107	Diode KBPC604 6A	
D131B	960 0197 107	Diode KBPC604 6A	
D132	963 0096 508	Diode 1N4148-52RE	
D133	963 0046 202	Zener diode MTZJ18B	
D134	963 0046 202	Zener diode MTZJ18B	
D135	963 0096 508	Diode 1N4148-52RE	
D136	963 0058 504	Zener diode MTZJ11B-0.5W	
D137	963 0096 508	Diode 1N4148-52RE	
D138	963 0058 407	Diode IN4007	
D141	963 0058 407	Diode IN4007	
D142	963 0058 407	Diode IN4007	
D143	963 0058 407	Diode IN4007	
D144	963 0058 407	Diode IN4007	
D145	963 0058 407	Diode IN4007	
D146	963 0058 407	Diode IN4007	
D148	963 0096 508	Diode 1N4148-52RE	
D149	963 0058 407	Diode IN4007	
D150	963 0058 407	Diode IN4007	
D151	963 0096 508	Diode 1N4148-52RE	
D152	963 0058 407	Diode IN4007	
D153	963 0058 407	Diode IN4007	
D154	960 0095 908	Zener diode MTZJ8.2B	
D157	963 0058 708	Zener diode MTZJ20B	
D158	963 0096 508	Diode 1N4148-52RE	
D159	963 0096 508	Diode 1N4148-52RE	
D160	963 0096 508	Diode 1N4148-52RE	
D601	963 0096 508	Diode 1N4148-52RE	
D602	963 0096 508	Diode 1N4148-52RE	
RESISTORS GROUP			
R104C	963 9005 451	Metal oxide 5.6 kohm 1W	
R104FL	963 9005 451	Metal oxide 5.6 kohm 1W	
R104FR	963 9005 451	Metal oxide 5.6 kohm 1W	
R104SL	963 9005 451	Metal oxide 5.6 kohm 1W	
R104SR	963 9005 451	Metal oxide 5.6 kohm 1W	
R105C	963 9005 451	Metal oxide 5.6 kohm 1W	
R105FL	963 9005 451	Metal oxide 5.6 kohm 1W	
R105FR	963 9005 451	Metal oxide 5.6 kohm 1W	
R105SL	963 9005 451	Metal oxide 5.6 kohm 1W	
R105SR	963 9005 451	Metal oxide 5.6 kohm 1W	
R106C	963 0047 900	Metal film 4.7 kohm 1W	
R106FL	963 0047 900	Metal film 4.7 kohm 1W	
R106FR	963 0047 900	Metal film 4.7 kohm 1W	
R106SL	963 0047 900	Metal film 4.7 kohm 1W	
R106SR	963 0047 900	Metal film 4.7 kohm 1W	
R107C	963 0047 900	Metal film 4.7 kohm 1W	
R107FL	963 0047 900	Metal film 4.7 kohm 1W	

Ref. No.	Part No.	Part Name	Remarks
R107FR	963 0047 900	Metal film 4.7 kohm 1W	
R107SL	963 0047 900	Metal film 4.7 kohm 1W	
R107SR	963 0047 900	Metal film 4.7 kohm 1W	
R108C	963 9005 477	Metal oxide 0.22 ohm 1W	
R108FL	963 9005 477	Metal oxide 0.22 ohm 1W	
R108FR	963 9005 477	Metal oxide 0.22 ohm 1W	
R108SL	963 9005 477	Metal oxide 0.22 ohm 1W	
R108SR	963 9005 477	Metal oxide 0.22 ohm 1W	
R109C	963 9005 477	Metal oxide 0.22 ohm 1W	
R109FR	963 9005 477	Metal oxide 0.22 ohm 1W	
R109FL	963 9005 477	Metal oxide 0.22 ohm 1W	
R109SL	963 9005 477	Metal oxide 0.22 ohm 1W	
R109SR	963 9005 477	Metal oxide 0.22 ohm 1W	
R110C	963 9005 477	Metal oxide 0.22 ohm 1W	
R110FR	963 9005 477	Metal oxide 0.22 ohm 1W	
R110FL	963 9005 477	Metal oxide 0.22 ohm 1W	
R110SL	963 9005 477	Metal oxide 0.22 ohm 1W	
R110SR	963 9005 477	Metal oxide 0.22 ohm 1W	
R111C	963 9005 477	Metal oxide 0.22 ohm 1W	
R111FL	963 9005 477	Metal oxide 0.22 ohm 1W	
R111FR	963 9005 477	Metal oxide 0.22 ohm 1W	
R111SL	963 9005 477	Metal oxide 0.22 ohm 1W	
R111SR	963 9005 477	Metal oxide 0.22 ohm 1W	
R118C	963 9005 480	Metal oxide 10 ohm 1W	
R118FL	963 9005 480	Metal oxide 10 ohm 1W	
R118FR	963 9005 480	Metal oxide 10 ohm 1W	
R118SL	963 9005 480	Metal oxide 10 ohm 1W	
R118SR	963 9005 480	Metal oxide 10 ohm 1W	
R119C	963 9005 480	Metal oxide 10 ohm 1W	
R119FL	963 9005 480	Metal oxide 10 ohm 1W	
R119FR	963 9005 480	Metal oxide 10 ohm 1W	
R119SL	963 9005 480	Metal oxide 10 ohm 1W	
R119SR	963 9005 480	Metal oxide 10 ohm 1W	
R135	963 0045 203	Winding 0.1 ohm 5W	
R136	963 0045 203	Winding 0.1 ohm 5W	
R141	960 0180 606	Metal film 0.22 ohm 1W	
R142	960 0180 606	Metal film 0.22 ohm 1W	
R148	960 0180 606	Metal film 0.22 ohm 1W	
R149	960 0180 606	Metal film 0.22 ohm 1W	
R151	963 9003 343	Metal film 68 ohm 1/4W	
R154	963 0043 108	Metal film 2.2 Mohm 2W	for E3,EU
R179	963 9003 055	Metal film 47 kohm 1/4W	
R181	963 0047 900	Metal film 4.7 kohm 1W	
R185	963 9005 655	Metal film 22 ohm 1/4W	
VR101	960 0091 601	Semi fixed resistor 1kohm	
VR102	960 0091 601	Semi fixed resistor 1kohm	
VR103	960 0091 601	Semi fixed resistor 1kohm	
VR104	960 0091 601	Semi fixed resistor 1kohm	
VR105	960 0091 601	Semi fixed resistor 1kohm	

Ref. No.	Part No.	Part Name	Remarks
CAPACITORS GROUP			
C101C	093 9005 888	Electrolytic 47uF/50V	
C101FL	093 9005 888	Electrolytic 47uF/50V	
C101FR	093 9005 888	Electrolytic 47uF/50V	
C101SL	093 9005 888	Electrolytic 47uF/50V	
C101SR	093 9005 888	Electrolytic 47uF/50V	
C102C	963 9005 752	Electrolytic 10uF/35V	
C102FL	963 9005 752	Electrolytic 10uF/35V	
C102FR	963 9005 752	Electrolytic 10uF/35V	
C102SL	963 9005 752	Electrolytic 10uF/35V	
C102SR	963 9005 752	Electrolytic 10uF/35V	
C103C	963 9003 084	Ceramic 100pF/500V	
C103FL	963 9003 084	Ceramic 100pF/500V	
C103FR	963 9003 084	Ceramic 100pF/500V	
C103SL	963 9003 084	Ceramic 100pF/500V	
C103SR	963 9003 084	Ceramic 100pF/500V	
C104C	963 9003 084	Ceramic 100pF/500V	
C104FL	963 9003 084	Ceramic 100pF/500V	
C104FR	963 9003 084	Ceramic 100pF/500V	
C104SL	963 9003 084	Ceramic 100pF/500V	
C104SR	963 9003 084	Ceramic 100pF/500V	
C105C	960 9003 108	Ceramic 0.022uF/25V	
C105FL	960 9003 108	Ceramic 0.022uF/25V	
C105FR	960 9003 108	Ceramic 0.022uF/25V	
C105SL	960 9003 108	Ceramic 0.022uF/25V	
C105SR	960 9003 108	Ceramic 0.022uF/25V	
C107C	963 9003 097	Mylar film 0.1uF/250V	
C107FL	963 9003 097	Mylar film 0.1uF/250V	
C107FR	963 9003 097	Mylar film 0.1uF/250V	
C107SL	963 9003 097	Mylar film 0.1uF/250V	
C107SR	963 9003 097	Mylar film 0.1uF/250V	
C131	963 9003 097	Mylar film 0.1uF/250V	
C132	963 9003 097	Mylar film 0.1uF/250V	
C133	963 9003 097	Mylar film 0.1uF/250V	
C134	963 9003 097	Mylar film 0.1uF/250V	
C135	963 9003 097	Mylar film 0.1uF/250V	
C136	963 0087 203	Electrolytic 10000uF/63V	
C137	963 0087 203	Electrolytic 10000uF/63V	
C138	963 9005 749	Electrolytic 1uF/50V	
C141	963 0021 900	Mylar film 0.047uF/100V	
C142	963 0021 900	Mylar film 0.047uF/100V	
C143	963 0021 900	Mylar film 0.047uF/100V	
C144	963 9003 110	Electrolytic 4700uF/35V	
C145	963 9003 123	Electrolytic 1000uF/35V	
C146	963 9005 749	Electrolytic 1uF/50V	
C148	963 9005 749	Electrolytic 1uF/50V	
C150	963 0021 900	Mylar film 0.047uF/100V	
C151	963 0021 900	Mylar film 0.047uF/100V	
C152	963 0021 900	Mylar film 0.047uF/100V	
C153	963 0021 104	Electrolytic 6800uF/16V	
C154	963 9005 752	Electrolytic 10uF/35V	
C155	963 0020 202	Ceramic 0.1uF/50V	

Ref. No.	Part No.	Part Name	Remarks	New
C157	963 9005 749	Electrolytic 1uF/50V		
C158	963 9003 136	Electrolytic 1000uF/25V		
C159	963 9005 749	Electrolytic 1uF/50V		
C161	963 9005 752	Electrolytic 10uF/35V		
C171	963 9005 312	Electrolytic 100uF/10V		
C171A	963 0020 202	Ceramic 0.1uF/50V		
C171B	963 0020 202	Ceramic 0.1uF/50V		
C171C	963 0020 202	Ceramic 0.1uF/50V		
C172	963 9005 833	Electrolytic 220uF/6.3V		
C173	963 9005 833	Electrolytic 220uF/6.3V		
C174	963 9005 752	Electrolytic 10uF/35V		
C175	963 9005 914	Electrolytic 4.7uF/50V		
C176	963 9005 749	Electrolytic 1uF/50V		
C177	963 9005 749	Electrolytic 1uF/50V		
C178	963 9003 149	Electrolytic 330uF/63V		
C181	963 0076 104	Ceramic 0.047uF/250V(AC)	for E2,EK,EA	
C182	963 9004 795	Electrolytic 10uF/100V		
C191	963 9006 007	Ceramic 2200pF/16V	for E2,EK,EA	*
C192	963 9006 007	Ceramic 2200pF/16V	for E2,EK,EA	*
C193	963 9006 007	Ceramic 2200pF/16V	for E2,EK,EA	*
C194	963 9006 007	Ceramic 2200pF/16V	for E2,EK,EA	*
C195	963 9006 007	Ceramic 2200pF/16V	for E2,EK,EA	*
C196	963 9006 007	Ceramic 2200pF/16V	for E2,EK,EA	*
C197	963 9006 007	Ceramic 2200pF/16V	for E2,EK,EA	*
C198C	960 9006 202	Ceramic 0.01uF/50V	for E2,EK,EA	
C198FL	960 9006 202	Ceramic 0.01uF/50V	for E2,EK,EA	
C198FR	960 9006 202	Ceramic 0.01uF/50V	for E2,EK,EA	
C198SL	960 9006 202	Ceramic 0.01uF/50V	for E2,EK,EA	
C198SR	960 9006 202	Ceramic 0.01uF/50V	for E2,EK,EA	
C199FL	960 9006 202	Ceramic 0.01uF/50V	for E2,EK,EA	
C199FR	960 9006 202	Ceramic 0.01uF/50V	for E2,EK,EA	
C601	963 9004 520	Ceramic 100pF/50V		
C602	963 9005 309	Electrolytic 47uF/10V		
C603	963 9005 309	Electrolytic 47uF/10V		
C604	963 9005 309	Electrolytic 47uF/10V		
C605	963 9005 891	Electrolytic 470uF/6.3V		
C606	963 9005 891	Electrolytic 470uF/6.3V		
C607	963 9005 794	Electrolytic 100uF/16V		
C611	963 9004 546	Ceramic 0.01uF/16V		
C612	963 9004 562	Ceramic 0.047uF/50V		
C613	963 9004 562	Ceramic 0.047uF/50V		

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
OTHER PARTS GROUP					
CN601	963 0086 709	11P connector socket		1	
CN602	963 0085 603	5P connector socket		1	
CP101	960 0118 908	AC cord connector base		1	
CP102	960 0128 901	3P connector base	for E3,EU,E2, E1C,E1K,EK,EA	1	
	960 0128 901	3P connector base	for E1,E1H,E1T	1	
CP103	960 0128 901	3P connector base		1	
CP104	960 0128 804	6P connector base		1	
CP105	960 0123 304	3P connector base	for E2,E1, E1H,E1K,E1T	1	
CP106	960 0123 207	3P connector base		1	
CP501	963 0086 806	9P connector base		1	
CP502-504	963 0086 903	5P connector base		3	
CP505	963 0087 009	6P connector base		1	
CP555	960 0239 609	13P connector base		1	
CP556	963 0087 805	11P connector base		1	
CP602,603	963 0086 903	5P connector base		2	
CP901	963 0048 909	3P connector base		1	
CP931	960 0123 304	3P connector base	for E2,E1,E1C, E1K,E1H,E1T	1	
⚠ F101,102	960 0188 705	Fuse 125V-S8A	for E3,EU	2	
⚠ F101	960 0142 602	Fuse 250V-S2.5A	for E2,E1K,EK,EA	1	
⚠ F102	963 0044 709	Fuse 250V-S3.15A	for E2,E1C, E1K,EK,EA	1	
F101A,102A	960 0005 804	Fuse clip holder		2	
F101B,102B	960 0005 804	Fuse clip holder		2	
F102A,F102B	960 0005 804	Fuse clip holder	for E1C	2	
GND101-103	960 9006 600	Terminal		3	
JK103	960 0194 809	2P speaker terminal		1	
⚠ JK104	960 0187 803	AC outlet(2P)	for E3,EU	1	
	960 0143 203	AC outlet	for E2,EK,EA	1	
L101C,FL, FR,SL,SR	963 0049 005	Inductor 0.5uh		5	
RLY101-104	960 0181 702	Relay G5PA-2		4	
RLY105	963 0071 303	Relay RSB24S		1	
RLY106	960 0181 605	Relay G5PA-1-8		1	
TP101-105	960 0161 405	3P connector base		1	
	963 0076 104	Ceramic 0.047uf/250V(AC)		1	
	960 0158 308	SW Push block		1	
	963 0074 009	8P Speaker terminal		1	
	960 0194 508	1P Pin jack		1	
	960 0194 605	2P Pin jack		1	
	960 0188 404	3P Pin jack		1	
	—	Heat sink reg TR		1	*

Ref. No.	Part No.	Part Name	Remarks	Q'ty	New
	—	Heat sink reg TR		1	*
	—	Heat sink		1	*
⚠	963 0094 924	Mini trans	for E3	1	*
⚠	963 0094 937	Mini trans	for E2,EK,EA	1	*
⚠	963 0094 911	Mini trans	for E1C	1	*
⚠	963 0094 940	Mini trans	for E1H	1	*
⚠	963 0094 911	Mini trans	for E1K	1	*
⚠	963 0094 940	Mini trans	for E1T	1	*
⚠	963 0094 940	Mini trans	for E1	1	*
⚠	963 0094 924	Mini trans	for EU	1	*
	963 0018 007	Screw 3x8 B-type ZNY/BH		1	
	963 0018 007	Screw 3x8 B-type ZNY/BH		1	

CPU P.W.B. ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC201	963 0095 800	IC CXP740096-156Q	
IC202	963 0057 602	IC TDA7330BD	
IC271	960 0222 506	IC KIA7812AP	
IC301	960 0180 004	IC LC75721E	
IC302	963 0074 504	IC BU2090F	
IC391	963 0084 905	IC GP1FA502RZ	
Q201	963 0075 202	Transistor DTC144EK	
Q202	963 0045 902	Transistor 2SC2412KT96(BR)	
Q251	963 0075 309	Transistor DTA114ES	
Q252	960 0196 603	Transistor KTC2874B	
Q253	960 0196 603	Transistor KTC2874B	
Q310	963 0058 203	Transistor DTA114EK	
Q311	963 0058 203	Transistor DTC114EK	
Q312	963 0058 203	Transistor DTA114EK	
Q313	963 0058 203	Transistor DTC114EK	
Q314	963 0058 203	Transistor DTA114EK	
Q315	963 0058 203	Transistor DTC114EK	
D201	963 0096 605	Diode 1N4148WS	
D202	963 0058 407	Diode IN4007	
D203	963 0096 508	Diode 1N4148-52RE	
D204	963 0096 605	Diode 1N4148WS	
D205	963 0096 605	Diode 1N4148WS	
D206	963 0096 508	Diode 1N4148-52RE	for E2,EK,EA
D251	963 0058 407	Diode IN4007	
D302	963 0096 508	Diode 1N4148-52RE	
D303	963 0096 508	Diode 1N4148-52RE	
D304	963 0096 508	Diode 1N4148-52RE	
D305	963 0096 605	Diode 1N4148WS	
D308	963 0096 605	Diode 1N4148WS	
D309	963 0096 605	Diode 1N4148WS	
ZD201	963 0047 502	Zener diode MTZJ3.3B	
ZD301	960 0095 802	Zener diode MTZJ6.8B	
ZD331	960 0095 500	Zener diode MTZJ5.1B	
ZD332	960 0095 500	Zener diode MTZJ5.1B	
ZD335	960 0095 500	Zener diode MTZJ5.1B	
ZD336	960 0095 500	Zener diode MTZJ5.1B	
LED301-304	960 0197 204	LED HL50RDRF4T	
LED306-309	960 0197 204	LED HL50RDRF4T	

Ref. No.	Part No.	Part Name	Remarks
RESISTORS GROUP			
R202	963 9003 398	Carbon chip 1 kohm 1/16W	
R203	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R204	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R205	963 9004 070	Carbon chip 10 kohm 1/16W	
R206	963 9004 232	Carbon chip 220 kohm 1/16W	
R209	963 9004 083	Carbon chip 100 kohm 1/16W	
R211	963 9004 070	Carbon chip 10 kohm 1/16W	
R212	963 9003 398	Carbon chip 1 kohm 1/16W	
R213	963 9004 122	Carbon chip 12 kohm 1/16W	
R214	963 9004 122	Carbon chip 12 kohm 1/16W	
R215	963 9004 122	Carbon chip 12 kohm 1/16W	
R216	963 9004 070	Carbon chip 10 kohm 1/16W	for E3,E2,EK,EA,EU
R217	963 9004 070	Carbon chip 10 kohm 1/16W	
R218	963 9004 177	Carbon chip 18 kohm 1/16W	for E2,EK,EA
	963 9004 070	Carbon chip 10 kohm 1/16W	for E1,E1C,E1H,E1K,E1T
R219	963 9004 177	Carbon chip 18 kohm 1/16W	for E2,EK,EA
R220	963 9004 070	Carbon chip 10 kohm 1/16W	
R225	963 9004 245	Carbon chip 2.2 Mohm 1/16W	for E2,EK,EA
R241	963 9004 339	Carbon chip 470 ohm 1/16W	
R242	963 9004 339	Carbon chip 470 ohm 1/16W	
R243	963 9004 339	Carbon chip 470 ohm 1/16W	
R244	963 9004 339	Carbon chip 470 ohm 1/16W	
R245	963 9004 339	Carbon chip 470 ohm 1/16W	
R246	963 9004 339	Carbon chip 470 ohm 1/16W	
R271	963 9005 626	Metal oxide 4.7 ohm 1W	
R281	963 9004 070	Carbon chip 10 kohm 1/16W	
R282	963 9004 070	Carbon chip 10 kohm 1/16W	
R283	963 9004 070	Carbon chip 10 kohm 1/16W	
R305B	963 9004 847	Carbon chip 3.3 kohm 1/16W	
R312	963 9004 070	Carbon chip 10 kohm 1/16W	
R315	963 0075 105	Carbon chip 10 kohm 1/16W	
R321	963 9004 436	Carbon chip 680 ohm 1/16W	
R322	963 9004 436	Carbon chip 680 ohm 1/16W	
R323	963 9004 436	Carbon chip 680 ohm 1/16W	
R324	963 9004 436	Carbon chip 680 ohm 1/16W	
R326	963 9004 436	Carbon chip 680 ohm 1/16W	
R327	963 9004 436	Carbon chip 680 ohm 1/16W	
R328	963 9004 436	Carbon chip 680 ohm 1/16W	
R329	963 9004 436	Carbon chip 680 ohm 1/16W	
R381	963 9004 465	Carbon chip 75 ohm 1/16W	
R382	963 9004 339	Carbon chip 470 ohm 1/16W	
R383	963 9004 339	Carbon chip 470 ohm 1/16W	
R384	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R385	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
RG01	963 9004 397	Carbon chip 56 kohm 1/16W	
RP02	963 9004 397	Carbon chip 56 kohm 1/16W	
RP03	963 9004 397	Carbon chip 56 kohm 1/16W	
RP04	963 9004 397	Carbon chip 56 kohm 1/16W	
RP05	963 9004 397	Carbon chip 56 kohm 1/16W	

Ref. No.	Part No.	Part Name	Remarks
RP06	963 9004 397	Carbon chip 56 kohm 1/16W	
RP07	963 9004 397	Carbon chip 56 kohm 1/16W	
RP08	963 9004 397	Carbon chip 56 kohm 1/16W	
RP09	963 9004 397	Carbon chip 56 kohm 1/16W	
RP10	963 9004 397	Carbon chip 56 kohm 1/16W	
RP11	963 9004 397	Carbon chip 56 kohm 1/16W	
RP12	963 9004 397	Carbon chip 56 kohm 1/16W	
RP13	963 9004 397	Carbon chip 56 kohm 1/16W	
RP14	963 9004 397	Carbon chip 56 kohm 1/16W	
RP15	963 9004 397	Carbon chip 56 kohm 1/16W	
RP16	963 9004 397	Carbon chip 56 kohm 1/16W	
RP17	963 9004 397	Carbon chip 56 kohm 1/16W	
RP18	963 9004 397	Carbon chip 56 kohm 1/16W	
RP19	963 9004 397	Carbon chip 56 kohm 1/16W	
RP20	963 9004 397	Carbon chip 56 kohm 1/16W	
RP21	963 9004 397	Carbon chip 56 kohm 1/16W	
RP22	963 9004 397	Carbon chip 56 kohm 1/16W	
RP23	963 9004 397	Carbon chip 56 kohm 1/16W	
RP24	963 9004 397	Carbon chip 56 kohm 1/16W	
RP25	963 9004 397	Carbon chip 56 kohm 1/16W	
RP26	963 9004 397	Carbon chip 56 kohm 1/16W	
RP27	963 9004 397	Carbon chip 56 kohm 1/16W	
RP28	963 9004 397	Carbon chip 56 kohm 1/16W	
RP29	963 9004 397	Carbon chip 56 kohm 1/16W	
RP30	963 9004 397	Carbon chip 56 kohm 1/16W	
RP31	963 9004 397	Carbon chip 56 kohm 1/16W	
RP32	963 9004 397	Carbon chip 56 kohm 1/16W	
RP33	963 9004 397	Carbon chip 56 kohm 1/16W	
RP34	963 9004 397	Carbon chip 56 kohm 1/16W	
RP35	963 9004 397	Carbon chip 56 kohm 1/16W	
RP36	963 9004 397	Carbon chip 56 kohm 1/16W	
RP37	963 9004 397	Carbon chip 56 kohm 1/16W	
RP38	963 9004 397	Carbon chip 56 kohm 1/16W	
CAPACITORS GROUP			
BC201	963 0061 504	Electrolytic 8200uF/5.5V	
C201	963 9004 698	Ceramic chip 0.01uF/50V	
C202	963 9004 711	Ceramic chip 0.1uF/50V	
C203	963 9004 698	Ceramic chip 0.01uF/50V	
C204	963 9005 914	Electrolytic 4.7uF/50V	
C205	963 9004 711	Ceramic chip 0.1uF/50V	
C206	096 3905 309	Electrolytic 47uF/10V	for E2,EK,EA
C207	963 9004 546	Ceramic 0.01uF/16V	for E2,EK,EA
C208	963 9005 354	Ceramic chip 270pF/50V	for E2,EK,EA
C209	963 9005 752	Electrolytic 10uF/35V	for E2,EK,EA
C210	963 9004 698	Ceramic chip 0.01uF/50V	for E2,EK,EA
C211	963 9004 614	Ceramic chip 27pF/50V	for E2,EK,EA
C212	963 9004 614	Ceramic chip 27pF/50V	for E2,EK,EA
C221	963 9005 312	Electrolytic 100uF/10V	
C251	963 9005 927	Electrolytic 0.1uF/50V	
C261	963 9004 575	Ceramic chip 100pF/50V	

Ref. No.	Part No.	Part Name	Remarks
C262	963 9004 575	Ceramic chip 100pF/50V	
C263	963 9004 575	Ceramic chip 100pF/50V	
C264	963 9004 575	Ceramic chip 100pF/50V	
C265	963 9004 575	Ceramic chip 100pF/50V	
C266	963 9004 575	Ceramic chip 100pF/50V	
C267	963 9004 575	Ceramic chip 100pF/50V	
C271	963 9005 794	Electrolytic 100uF/16V	
C272	963 9005 752	Electrolytic 10uF/35V	
C301	963 9005 778	Electrolytic 10uF/50V	
C302	963 9004 753	Ceramic chip 0.047uF/50V	
C303	963 9005 309	Electrolytic 47uF/10V	
C304	960 9003 108	Ceramic 0.022uF/25V	
C305	963 9005 859	Electrolytic 47uF/16V	
C306	963 9004 766	Mylar film 0.1uF/100V	
C307	963 9005 749	Electrolytic 1uF/50V	
C308	963 0021 900	Mylar film 0.047uF/100V	
C309	963 0021 900	Mylar film 0.047uF/100V	
C310	963 9005 749	Electrolytic 1uF/50V	
C311	963 9005 406	Ceramic chip 30pF/50V	
C312	963 9005 859	Electrolytic 47uF/16V	
C313	963 9005 419	Mylar film 0.047uF/63V	
C321	963 9004 685	Ceramic chip 1000pF/50V	
C322	963 9004 575	Ceramic chip 100pF/50V	
C324	963 9004 575	Ceramic chip 100pF/50V	
C325	963 9004 575	Ceramic chip 100pF/50V	
C331	963 9004 698	Ceramic chip 0.01uF/50V	
C332	963 9004 698	Ceramic chip 0.01uF/50V	
C335	963 9004 698	Ceramic chip 0.01uF/50V	
C336	963 9004 698	Ceramic chip 0.01uF/50V	
C381	963 9005 309	Electrolytic 47uF/10V	
C382	963 9004 575	Ceramic chip 100pF/50V	
C383	963 9004 575	Ceramic chip 100pF/50V	
C384	963 9005 749	Electrolytic 1uF/50V	
C385	963 9005 749	Electrolytic 1uF/50V	
C386	963 9004 753	Ceramic chip 0.047uF/50V	
C391	963 9004 591	Ceramic chip 22pF/50V	
C392	963 9004 711	Ceramic chip 0.1uF/50V	
C393	963 9005 859	Electrolytic 47uF/16V	
C931	963 0076 104	Ceramic 0.047uF/250V(AC)	

Ref. No.	Part No.	Part Name	Remarks	Q'ty
OTHER PARTS GROUP				
BD201,202	963 0053 800	Beads inductor		2
CN201	963 0096 906	6P wire		1
CN202	963 0099 408	4P wire		1
CN302	963 0096 702	6P wire		1
CN931	963 0089 502	2P wire	for E2,E1,G1C,G1H,G1K,G1T,EK,EA	1
CP201	963 0097 604	6P connector base		1
CP202	963 0050 104	4P connector base		1
CP301A	963 0097 905	20P connector base		1
CP301B	960 0129 007	20P FFC connector base		1
CP303	963 0049 102	3P connector base		1
CP401	963 0088 008	10P connector base		1
CP402	963 0097 507	15P connector base		1
CP552	960 0239 609	13P connector base		1
CP553	963 0088 008	10P connector base		1
CP601	963 0087 805	11P connector base		1
CP701	963 0087 504	19P connector base		1
CP702	963 0087 902	17P connector base		1
CP703	963 0088 008	10P connector base		1
CP801	963 0087 407	16P connector base		1
CP802	963 0087 504	19P connector base		1
CP803	963 0097 400	8P connector base		1
FL301	960 0180 509	Fl 16-ST-42GNK		1
G301	963 0088 202	1P contact ass'y		1
JK301	963 0084 206	3P jack		1
L301	960 0128 008	Inductor 100uh		1
L302	960 0010 307	Inductor 10uh		1
L391	960 0215 908	Inductor 4.7uh		1
RMC301	960 0181 100	Remocon module		1
SW301B-309B	963 0095 305	Tact SW		9
SW301C-309C	963 0045 708	Tact SW		9
SW302A-304A	963 0095 305	Tact SW		3
SW305A	963 0045 708	Tact SW		1
SW931	963 0098 807	SW push	for E2,E1,G1C,G1H,G1K,G1T,EK,EA	1
VEC301,302	963 0095 208	Encoder SW		2
X201	960 0181 003	Ceramic resonator CST12.0MTW		1
X202	963 0099 505	Crystal 4.332MHz	for E2,EK,EA	1
	—	Heat sink		1
	963 0018 007	Screw 3x8 B-type ZNY/BH		1
	960 0184 408	FLT holder		1

CNT P.W.B. ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC401	963 0043 700	IC LC72131-PLL	
IC402	963 0043 904	IC LA1266	
IC403	963 0044 000	IC LA3401	
IC621	960 0180 101	IC LA7952	
IC622	960 0180 101	IC LA7952	
IC651	960 0175 200	IC BA7625	for E3,EU
IC652	963 0083 304	IC BA7626	for E3,EU
IC653	963 0083 304	IC BA7626	for E3,EU
Q401	963 0099 301	Transistor KTC3880S-O	
Q402	963 0079 305	Transistor DTA114YK	
Q403	963 0058 203	Transistor DTA114EK	
Q404	963 0058 203	Transistor DTA114EK	
Q405	960 0196 603	Transistor KTC2874B	
Q406	960 0196 603	Transistor KTC2874B	
Q407	963 0079 305	Transistor DTC114YK	
Q408	963 0058 203	Transistor DTA114EK	
Q409	963 0099 301	Transistor KTC3880S-O	for E2,EK,EA
Q501C	960 0196 603	Transistor KTC2874B	
Q501FL	960 0196 603	Transistor KTC2874B	
Q501FR	960 0196 603	Transistor KTC2874B	
Q501SL	960 0196 603	Transistor KTC2874B	
Q501SR	960 0196 603	Transistor KTC2874B	
Q502C	960 0196 205	Transistor KSA992F	
Q502FL	960 0196 205	Transistor KSA992F	
Q502FR	960 0196 205	Transistor KSA992F	
Q502SL	960 0196 205	Transistor KSA992F	
Q502SR	960 0196 205	Transistor KSA992F	
Q503C	960 0196 205	Transistor KSA992F	
Q503FL	960 0196 205	Transistor KSA992F	
Q503FR	960 0196 205	Transistor KSA992F	
Q503SL	960 0196 205	Transistor KSA992F	
Q503SR	960 0196 205	Transistor KSA992F	
Q504C	960 0196 506	Transistor KSC1845F	
Q504FL	960 0196 506	Transistor KSC1845F	
Q504FR	960 0196 506	Transistor KSC1845F	
Q504SL	960 0196 506	Transistor KSC1845F	
Q504SR	960 0196 506	Transistor KSC1845F	
Q551	960 0196 700	Transistor KTC3200BL	
Q552	960 0196 302	Transistor KTA1268BL	
Q553	963 0075 309	Transistor DTA114ES	
Q554	963 0075 309	Transistor DTA114ES	
Q555	963 0075 309	Transistor DTA114ES	
Q621	960 0005 202	Transistor KTC3198Y	
Q622	960 0005 202	Transistor KTC3198Y	
Q623	960 0196 904	Transistor DTC114YS	
Q624	960 0196 904	Transistor DTC114YS	
Q625	960 0005 202	Transistor KTC3198Y	
Q626	960 0005 202	Transistor KTC3198Y	
Q627	960 0196 904	Transistor DTC114YS	
Q628	960 0196 904	Transistor DTC114YS	
Q651	960 0005 105	Transistor KTA1266Y	for E3,EU
Q652	960 0005 105	Transistor KTA1266Y	for E3,EU
Q653	960 0005 105	Transistor KTA1266Y	for E3,EU
D403	963 0096 605	Diode 1N4148WS	
D404	963 0096 508	Diode 1N4148-52RE	
D405	963 0096 605	Diode 1N4148WS	
D406	963 0096 605	Diode 1N4148WS	
D551	963 0096 508	Diode 1N4148-52RE	
D552	963 0096 508	Diode 1N4148-52RE	
D553	963 0096 508	Diode 1N4148-52RE	
D554	963 0096 508	Diode 1N4148-52RE	
D555	963 0096 508	Diode 1N4148-52RE	
D556	963 0096 508	Diode 1N4148-52RE	
D557	963 0096 508	Diode 1N4148-52RE	
D558	963 0096 508	Diode 1N4148-52RE	
D559	963 0096 508	Diode 1N4148-52RE	
D560	963 0096 508	Diode 1N4148-52RE	
D561	963 0096 508	Diode 1N4148-52RE	
D562	963 0058 407	Diode IN4007	
D563	963 0058 407	Diode IN4007	
D564	960 0095 500	Zener diode MTZJ5.1B	
D565	963 0096 508	Diode 1N4148-52RE	
D621	963 0096 508	Diode 1N4148-52RE	
D622	963 0096 508	Diode 1N4148-52RE	
ZD341	960 0095 500	Zener diode MTZJ5.1B	
ZD342	960 0095 500	Zener diode MTZJ5.1B	
ZD401	960 0095 500	Zener diode MTZJ5.1B	
RESISTORS GROUP			
R401	963 9004 821	Carbon chip 10 ohm 1/16W	
R403	963 9004 339	Carbon chip 470 ohm 1/16W	
R404	963 9004 083	Carbon chip 100 kohm 1/16W	
R405	960 9003 807	Metal film 100 ohm 1/4W	
R406	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R407	963 9004 339	Carbon chip 470 ohm 1/16W	for E3,EU
	963 9005 008	Carbon chip 620 ohm 1/16W	for E2,E1,E1C,E1H, E1K,E1T,EK,EA
R408	963 9004 119	Carbon chip 1.2 kohm 1/16W	for E3,EU,E1,E1C, E1H,E1K,E1T
	963 9004 436	Carbon chip 680 ohm 1/16W	for E2,EK,EA
R409	963 9004 339	Carbon chip 470 ohm 1/16W	
R411	963 9005 011	Carbon chip 68 kohm 1/16W	
R412	963 9004 834	Carbon chip 5.6 kohm 1/16W	
R413	960 9006 503	Metal film 220 ohm 1/4W	

Ref. No.	Part No.	Part Name	Remarks
R414	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R415	963 9003 398	Carbon chip 1 kohm 1/16W	
R416	963 9005 561	Metal oxide 680 ohm 1W	
R417	963 9003 398	Carbon chip 1 kohm 1/16W	
R418	963 9004 274	Carbon chip 33 kohm 1/16W	
R420	963 9004 847	Carbon chip 3.3 kohm 1/16W	
R426	963 9004 070	Carbon chip 10 kohm 1/16W	
R427	963 9004 070	Carbon chip 10 kohm 1/16W	
R429	963 9004 850	Carbon chip 82 ohm 1/16W	
R430	960 9003 807	Metal film 100 ohm 1/4W	
R431	963 9004 371	Carbon chip 5.1 kohm 1/16W	
R432	963 9004 070	Carbon chip 10 kohm 1/16W	
R434	960 9003 807	Metal film 100 ohm 1/4W	
R435	963 9004 847	Carbon chip 3.3 kohm 1/16W	
R437	963 9004 083	Carbon chip 100 kohm 1/16W	
R438	963 9004 083	Carbon chip 100 kohm 1/16W	for E3,EU,E1,E1C, E1H,E1K,E1T
	963 9004 164	Carbon chip 150 kohm 1/16W	for E2,EK,EA
R439	963 9004 083	Carbon chip 100 kohm 1/16W	for E3,EU,E1,E1C, E1H,E1K,E1T
	963 9004 164	Carbon chip 150 kohm 1/16W	for E2,EK,EA
R440	963 9004 863	Carbon chip 120 kohm 1/16W	for E3,EU,E1,E1C, E1H,E1K,E1T
	963 9004 232	Carbon chip 220 kohm 1/16W	for E2,EK,EA
R441	963 9004 863	Carbon chip 120 kohm 1/16W	for E3,EU,E1,E1C, E1H,E1K,E1T
	963 9004 232	Carbon chip 220 kohm 1/16W	for E2,EK,EA
R442	963 9004 847	Carbon chip 3.3 kohm 1/16W	for E3,EU,E1,E1C, E1H,E1K,E1T
	963 9004 216	Carbon chip 2.2 kohm 1/16W	for E2,EK,EA
R443	963 9004 847	Carbon chip 3.3 kohm 1/16W	for E3,E1,E1C,E1H, E1K,E1T,EU
	963 9004 216	Carbon chip 2.2 kohm 1/16W	for E2,EK,EA
R444	963 9004 481	Carbon chip 8.2 kohm 1/16W	for E3,EU,E1,E1C, E1H,E1K,E1T
	963 9004 847	Carbon chip 3.3 kohm 1/16W	for E2,EK,EA
R445	963 9004 481	Carbon chip 8.2 kohm 1/16W	for E3,EU,E1,E1C, E1H,E1K,E1T
	963 9004 847	Carbon chip 3.3 kohm 1/16W	for E2,EK,EA
R448	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R449	963 9005 037	Carbon chip 3.9 kohm 1/16W	for E2,EK,EA
R450	963 9003 398	Carbon chip 1 kohm 1/16W	for E2,EK,EA
R455	963 9004 876	Carbon chip 330 ohm 1/16W	
R456	963 9003 385	Carbon chip 100 ohm 1/16W	
R470	963 9003 398	Carbon chip 1 kohm 1/16W	
R471VT	963 9004 203	Carbon chip 220 ohm 1/16W	
R472	963 9003 385	Carbon chip 100 ohm 1/16W	for E2,EK,EA
R474	963 9004 889	Carbon chip 180 ohm 1/16W	for E2,EK,EA
R475	963 9004 122	Carbon chip 12 kohm 1/16W	
R476	963 9004 397	Carbon chip 56 kohm 1/16W	
R478	963 9004 070	Carbon chip 10 kohm 1/16W	
R479	963 9004 083	Carbon chip 100 kohm 1/16W	
R481C	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R481FL	963 9004 245	Carbon chip 2.2 Mohm 1/16W	

Ref. No.	Part No.	Part Name	Remarks
R481FR	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R481SL	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R481SR	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R481SW	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R482C	963 9003 385	Carbon chip 100 ohm 1/16W	
R482FL	963 9003 385	Carbon chip 100 ohm 1/16W	
R482FR	963 9003 385	Carbon chip 100 ohm 1/16W	
R482SL	963 9003 385	Carbon chip 100 ohm 1/16W	
R482SR	963 9003 385	Carbon chip 100 ohm 1/16W	
R482SW	963 9003 385	Carbon chip 100 ohm 1/16W	
R509C	960 9005 902	Metal film 1.2 kohm 1/4W	
R509FL	960 9005 902	Metal film 1.2 kohm 1/4W	
R509FR	960 9005 902	Metal film 1.2 kohm 1/4W	
R509SL	960 9005 902	Metal film 1.2 kohm 1/4W	
R509SR	960 9005 902	Metal film 1.2 kohm 1/4W	
R511C	960 9004 301	Metal film 47 ohm 1/4W	
R511FL	960 9004 301	Metal film 47 ohm 1/4W	
R511FR	960 9004 301	Metal film 47 ohm 1/4W	
R511SL	960 9004 301	Metal film 47 ohm 1/4W	
R511SR	960 9004 301	Metal film 47 ohm 1/4W	
R559	963 9005 642	Metal film 1.2 kohm 1W	
R565	963 9005 642	Metal film 1.2 kohm 1W	
R570	963 9005 642	Metal film 1.2 kohm 1W	
R621	963 9004 465	Carbon chip 75 ohm 1/16W	
R622	963 9004 465	Carbon chip 75 ohm 1/16W	
R623	963 9004 465	Carbon chip 75 ohm 1/16W	
R624	963 9004 465	Carbon chip 75 ohm 1/16W	
R625	963 9004 465	Carbon chip 75 ohm 1/16W	
R626	963 9004 465	Carbon chip 75 ohm 1/16W	
R627	963 9005 943	Carbon chip 68 ohm 1/16W	
R628	963 9004 070	Carbon chip 10 kohm 1/16W	
R630	963 9005 943	Carbon chip 68 ohm 1/16W	
R631	963 9004 070	Carbon chip 10 kohm 1/16W	
R634	963 9004 070	Carbon chip 10 kohm 1/16W	
R635	963 9003 275	Carbon film 390 ohm 1/5W	
R637	963 9004 070	Carbon chip 10 kohm 1/16W	
R641	963 9004 465	Carbon chip 75 ohm 1/16W	
R901	960 9009 270	Metal film 470 ohm 2W	
R902	960 9009 270	Metal film 470 ohm 2W	
VR401	960 0096 606	Semi fixed resistor 20kohm	
VR402	963 0056 205	Semi fixed resistor 50kohm	for E3,E1,E1C,E1H, E1K,E1T,EU
	960 0096 402	Semi fixed resistor 100kohm	for E2,EK,EA
VR403	963 0052 005	Semi fixed resistor 200kohm	

Ref. No.	Part No.	Part Name	Remarks
CAPACITORS GROUP			
C341	963 9004 546	Ceramic 0.01uF/16V	
C342	963 9004 546	Ceramic 0.01uF/16V	
C401	963 9004 685	Ceramic chip 1000pF/50V	
C402	963 9004 685	Ceramic chip 1000pF/50V	
C403	963 9004 737	Ceramic chip 0.022uF/25V	
C404	963 9004 892	Ceramic 2pF/50V	
C405	963 9004 737	Ceramic chip 0.022uF/25V	
C406	963 9004 902	Ceramic chip 18pF/50V	
C408	960 9004 709	Ceramic 6pF/50V	
C409	963 9004 520	Ceramic 100pF/50V	
C410	963 9004 915	Ceramic 470pF/50V	
C411	963 9004 685	Ceramic chip 1000pF/50V	
C412	963 9004 737	Ceramic chip 0.022uF/25V	
C413	963 9004 575	Ceramic chip 100pF/50V	
C414	963 9005 846	Electrolytic 2.2uF/50V	
C415	963 9005 862	Electrolytic 47uF/16V	
C416	963 9005 765	Electrolytic 10uF/35V	
C417	963 9005 794	Electrolytic 100uF/16V	
C418	963 9004 698	Ceramic chip 0.01uF/50V	
C419	963 9005 765	Electrolytic 10uF/35V	
C420	963 9004 591	Ceramic chip 22pF/50V	
C421	963 9005 998	Ceramic chip 24pF/50V	
C423	963 9004 737	Ceramic chip 0.022uF/25V	
C424	963 9004 737	Ceramic chip 0.022uF/25V	
C425	963 9005 914	Electrolytic 4.7uF/50V	
C426	963 9005 956	Electrolytic 3.3uF/50V	
C427	963 9005 914	Electrolytic 4.7uF/50V	
C428	963 9004 737	Ceramic chip 0.022uF/25V	
C430	963 0021 900	Mylar film 0.047uF/100V	
C431	963 9004 627	Ceramic chip 33pF/50V	
C432	963 9005 862	Electrolytic 47uF/16V	
C433	963 9004 737	Ceramic chip 0.022uF/25V	
C434	963 9005 749	Electrolytic 1uF/50V	for E3,EU
	963 9005 985	Electrolytic 0.33uF/50V	for E2,E1,E1C,E1H, E1K,E1T,EK,EA
C435	963 9004 737	Ceramic chip 0.022uF/25V	
C436	963 9004 737	Ceramic chip 0.022uF/25V	
C437	963 9005 862	Electrolytic 47uF/16V	
C438	963 9005 749	Electrolytic 1uF/50V	
C439	963 9005 972	Electrolytic 0.22uF/50V	
C440	963 9005 749	Electrolytic 1uF/50V	
C441	963 9005 749	Electrolytic 1uF/50V	
C442	963 9005 846	Electrolytic 2.2uF/50V	
C443	963 9005 765	Electrolytic 10uF/35V	
C444	963 9005 914	Electrolytic 4.7uF/50V	
C445	963 9005 765	Electrolytic 10uF/35V	
C446	963 9005 053	Ceramic 270pF/50V	for E3,EU
	963 9005 448	Ceramic 330pF/50V	for E2,EK,EA
	963 9004 931	Ceramic 180pF/50V	for E1,E1C,E1H,E1K,E1T
C447	963 9005 053	Ceramic 270pF/50V	for E3,EU

Ref. No.	Part No.	Part Name	Remarks
	963 9005 448	Ceramic 330pF/50V	for E2,EK,EA
	963 9004 931	Ceramic 180pF/50V	for E1,E1C,E1H,E1K,E1T
C448	963 9004 960	Ceramic 470pF/50V	for E3,EU
	963 9005 448	Ceramic 330pF/50V	for E1,E1C,E1H,E1K,E1T
C449	963 9004 960	Ceramic 470pF/50V	for E3,EU
	963 9005 448	Ceramic 330pF/50V	for E1,E1C,E1H,E1K,E1T
C450	963 9005 765	Electrolytic 10uF/35V	
C451	963 9005 765	Electrolytic 10uF/35V	
C453	963 9004 614	Ceramic chip 27pF/50V	
C456	963 9004 672	Ceramic chip 680pF/50V	
C461	963 9004 591	Ceramic chip 22pF/50V	
C462	963 9004 654	Ceramic chip 470pF/50V	for E2,EK,EA
C463	963 9004 782	Mylar film 0.056uF/100V	
C464	963 9004 973	Ceramic 3pF/50V	
C471VT	963 9005 749	Electrolytic 1uF/50V	
C472VT	963 9004 753	Ceramic chip 0.047uF/50V	
C481C	963 9004 575	Ceramic chip 100pF/50V	
C481FL	963 9004 575	Ceramic chip 100pF/50V	
C481FR	963 9004 575	Ceramic chip 100pF/50V	
C481SL	963 9004 575	Ceramic chip 100pF/50V	
C481SR	963 9004 575	Ceramic chip 100pF/50V	
C481SW	963 9004 575	Ceramic chip 100pF/50V	
C501C	963 9005 820	Electrolytic 22uF/16V	
C501FL	963 9005 820	Electrolytic 22uF/16V	
C501FR	963 9005 820	Electrolytic 22uF/16V	
C501M	963 9005 765	Electrolytic 10uF/35V	
C501SL	963 9005 820	Electrolytic 22uF/16V	
C501SR	963 9005 820	Electrolytic 22uF/16V	
C502C	963 9005 765	Electrolytic 10uF/35V	
C502FL	963 9005 765	Electrolytic 10uF/35V	
C502FR	963 9005 765	Electrolytic 10uF/35V	
C502SL	963 9005 765	Electrolytic 10uF/35V	
C502SR	963 9005 765	Electrolytic 10uF/35V	
C503C	963 9003 165	Ceramic 220pF/500V	
C503FL	963 9003 165	Ceramic 220pF/500V	
C503FR	963 9003 165	Ceramic 220pF/500V	
C503SL	963 9003 165	Ceramic 220pF/500V	
C503SR	963 9003 165	Ceramic 220pF/500V	
C504C	963 9003 178	Ceramic 220pF/50V	
C504FL	963 9003 178	Ceramic 220pF/50V	
C504FR	963 9003 178	Ceramic 220pF/50V	
C504SL	963 9003 178	Ceramic 220pF/50V	
C504SR	963 9003 178	Ceramic 220pF/50V	
C505C	963 9003 181	Ceramic 33pF/500V	
C505FL	963 9003 181	Ceramic 33pF/500V	
C505FR	963 9003 181	Ceramic 33pF/500V	
C505SL	963 9003 181	Ceramic 33pF/500V	
C505SR	963 9003 181	Ceramic 33pF/500V	
C506C	963 9005 312	Electrolytic 100uF/10V	
C506FL	963 9005 312	Electrolytic 100uF/10V	
C506FR	963 9005 312	Electrolytic 100uF/10V	

Ref. No.	Part No.	Part Name	Remarks
C506SL	963 9005 312	Electrolytic 100uF/10V	
C506SR	963 9005 312	Electrolytic 100uF/10V	
C507C	963 9003 194	Mylar film 0.0022uF/100V	
C507FL	963 9003 194	Mylar film 0.0022uF/100V	
C507FR	963 9003 194	Mylar film 0.0022uF/100V	
C507SL	963 9003 194	Mylar film 0.0022uF/100V	
C507SR	963 9003 194	Mylar film 0.0022uF/100V	
C551	963 9005 846	Electrolytic 2.2uF/50V	
C551M	963 9005 817	Electrolytic 100uF/35V	
C551S	963 9004 562	Ceramic 0.047uF/50V	
C552	963 9005 927	Electrolytic 0.1uF/50V	
C553	963 9005 927	Electrolytic 0.1uF/50V	
C554	963 9005 927	Electrolytic 0.1uF/50V	
C555	963 9004 546	Ceramic 0.01uF/16V	
C556	963 9004 546	Ceramic 0.01uF/16V	
C557	963 9005 752	Electrolytic 10uF/35V	
C621	963 9005 309	Electrolytic 47uF/10V	
C622	963 9005 309	Electrolytic 47uF/10V	
C623	963 9005 309	Electrolytic 47uF/10V	
C624	963 9005 891	Electrolytic 470uF/6.3V	
C625	963 9005 891	Electrolytic 470uF/6.3V	
C626	963 9005 309	Electrolytic 47uF/10V	
C627	963 9005 309	Electrolytic 47uF/10V	
C628	963 9005 309	Electrolytic 47uF/10V	
C629	963 9005 891	Electrolytic 470uF/6.3V	
C630	963 9005 891	Electrolytic 470uF/6.3V	
C631	963 9005 794	Electrolytic 100uF/16V	
C632	963 9004 753	Ceramic chip 0.047uF/50V	
C633	963 9004 753	Ceramic chip 0.047uF/50V	
C634	963 9005 749	Electrolytic 1uF/50V	
C635	963 9005 749	Electrolytic 1uF/50V	
C651	963 9005 914	Electrolytic 4.7uF/50V	
C652	963 9005 914	Electrolytic 4.7uF/50V	
C653	963 9005 914	Electrolytic 4.7uF/50V	
C654	963 9005 914	Electrolytic 4.7uF/50V	
C655	963 9005 914	Electrolytic 4.7uF/50V	
C656	963 9005 914	Electrolytic 4.7uF/50V	
C657	963 9005 969	Electrolytic 4700uF/6.3V	
C658	963 9005 891	Electrolytic 470uF/6.3V	
C659	963 9005 891	Electrolytic 470uF/6.3V	
C660	963 9005 312	Electrolytic 100uF/10V	
C661	963 9005 312	Electrolytic 100uF/10V	
C662	963 9005 312	Electrolytic 100uF/10V	
C671	963 9005 749	Electrolytic 1uF/50V	
C672	963 9005 749	Electrolytic 1uF/50V	
C673	963 9003 108	Ceramic 0.022uF/25V	
C674	963 9005 312	Electrolytic 100uF/10V	
C681	963 9005 749	Electrolytic 1uF/50V	
C682	963 9005 749	Electrolytic 1uF/50V	
C683	963 9003 108	Ceramic 0.022uF/25V	
C684	963 9005 312	Electrolytic 100uF/10V	

Ref. No.	Part No.	Part Name	Remarks	Q'ty
C691	963 9005 749	Electrolytic 1uF/50V		
C692	963 9005 749	Electrolytic 1uF/50V		
C693	963 9003 108	Ceramic 0.022uF/25V		
C694	963 9005 312	Electrolytic 100uF/10V		
C901	963 9004 533	Ceramic 0.001uF/50V		
C902	963 9004 533	Ceramic 0.001uF/50V		
C903	963 9005 749	Electrolytic 1uF/50V		
C904	963 9003 108	Ceramic 0.022uF/25V		
OTHER PARTS GROUP				**Q'ty**
CF401,402	960 0187 104	Ceramic filter	for E3,EU	2
CF401,402	960 0177 509	Ceramic filter	for E2,EK,EA	2
CF401	960 0187 104	Ceramic filter	for E1,E1,b, E1K,E1H,E1T	1
CF402	960 0177 509	Ceramic filter	for E1,E1,b, E1K,E1H,E1T	1
CF403	960 0187 609	Ceramic resonator		1
CN392	963 0087 300	3P wire		1
CN401	963 0085 409	10P connector socket		1
CN402	963 0097 303	15P connector socket		1
CN501	963 0085 506	9P connector socket		1
CN502-504	963 0085 603	5P connector socket		3
CN505	963 0085 700	6P connector socket		1
CN552	960 0239 900	13P connector socket		1
CN553	963 0085 409	10P connector socket		1
CN555	960 0239 900	13P connector socket		1
CN554	963 0097 002	13P wire		1
CN556	963 0086 709	11P connector socket		1
CN603	963 0085 603	5P connector socket		1
CN621	963 0085 603	5P connector socket		1
CN651	963 0085 603	5P connector socket	for E3,EU	1
CN901	963 0090 902	3P wire		1
CP302	963 0075 600	6P connector base		1
CP392	963 0048 909	3P connector base		1
CP551	963 0097 701	12P connector base		1
CP554	963 0097 808	13P connector base		1
CP621	963 0086 903	5P connector base		1
CP651	963 0086 903	5P connector base	for E3,EU	1
FE401	960 0187 706	Front end FTE4-401TB		1
G401	—	1P contact ass'y		1
G901	—	1P contact ass'y		1
JK901	963 0095 402	Head phone jack		1
L401	963 0052 102	Inductor 1uh		1
L402	960 0010 307	Inductor 10uh		1
L403	963 0056 409	If MW coil		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
SW901	960 0176 209	Push SW	for E3,EU	1
T401	960 0186 600	If MW coil PCFMAF-270		1
T402	960 0007 349	If FM coil M292MEA-K5611FKG		1
T403	960 0007 352	If FM coil 292MEA-K5612X		1
T404	960 0071 207	MPX filter	for E2,EK,EA	1
T405	960 0071 207	MPX filter	for E2,EK,EA	1
T406	960 0037 607	Antibirdie filter	for E2,EK,EA	1
VEC303	963 0095 208	Encoder SW		1
X401	963 0099 107	Crystal 7.2MHz		1
X402	963 0043 302	Ceramic resonator CSB456F11		1
	963 0052 403	3P antenna terminal		1
	963 0099 204	3P pin jack	for E3,EU	1
	960 0181 304	3P S terminal		1
	960 0181 401	4P S terminal		1
	960 0188 307	6P pin jack		1
	960 0188 404	6P pin jack		1
	960 0184 000	Bracket		4
	963 0054 003	Tuner pack shield		1
	963 0099 000	Earth “D”plate		1

INPUT VOLUME P.W.B. ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC701	963 0096 401	IC BD3811K1	
IC721	963 0024 004	IC NJM2068M	
IC761	963 0024 004	IC NJM2068M	
IC762	963 0024 004	IC NJM2068M	
IC763	963 0024 004	IC NJM2068M	
IC781	963 0024 004	IC NJM2068M	
IC782	963 0024 004	IC NJM2068M	
IC783	963 0024 004	IC NJM2068M	
Q751	963 0075 503	Transistor DTC144ES	
Q752	963 0075 503	Transistor DTA114ES	
Q753	960 0196 807	Transistor 2SK117Y	
Q754	960 0196 807	Transistor 2SK117Y	
Q755	963 0075 503	Transistor DTC144ES	
Q756	963 0075 309	Transistor DTA114ES	
Q757	960 0196 807	Transistor 2SK117Y	
Q758	960 0196 807	Transistor 2SK117Y	
Q771	963 0075 503	Transistor DTC144ES	
Q772	963 0075 309	Transistor DTA114ES	
Q773	960 0196 807	Transistor 2SK117Y	
Q774	960 0196 807	Transistor 2SK117Y	
D751	963 0096 605	Diode 1N4148WS	
D752	963 0096 605	Diode 1N4148WS	
D753	963 0096 605	Diode 1N4148WS	
D754	963 0096 605	Diode 1N4148WS	
D771	963 0096 605	Diode 1N4148WS	
D772	963 0096 605	Diode 1N4148WS	
ZD701	960 0222 603	Zener diode MTZJ7.5A	
ZD702	960 0222 603	Zener diode MTZJ7.5A	
RESISTORS GROUP			
R701L	963 9004 339	Carbon chip 470 ohm 1/16W	
R701R	963 9004 339	Carbon chip 470 ohm 1/16W	
R702L	963 9004 339	Carbon chip 470 ohm 1/16W	
R702R	963 9004 339	Carbon chip 470 ohm 1/16W	
R703L	963 9004 339	Carbon chip 470 ohm 1/16W	
R703R	963 9004 339	Carbon chip 470 ohm 1/16W	
R704L	963 9004 339	Carbon chip 470 ohm 1/16W	
R704R	963 9004 339	Carbon chip 470 ohm 1/16W	
R705L	963 9004 339	Carbon chip 470 ohm 1/16W	
R705R	963 9004 339	Carbon chip 470 ohm 1/16W	
R706L	963 9004 339	Carbon chip 470 ohm 1/16W	
R706R	963 9004 339	Carbon chip 470 ohm 1/16W	
R707L	963 9004 339	Carbon chip 470 ohm 1/16W	
R707R	963 9004 339	Carbon chip 470 ohm 1/16W	
R708L	963 9004 339	Carbon chip 470 ohm 1/16W	
R708R	963 9004 339	Carbon chip 470 ohm 1/16W	
R711L	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R711R	963 9004 245	Carbon chip 2.2 Mohm 1/16W	

Ref. No.	Part No.	Part Name	Remarks
R712L	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R712R	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R713L	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R713R	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R714L	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R714R	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R715L	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R715R	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R716L	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R716R	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R717L	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R717R	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R718L	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R718R	963 9004 245	Carbon chip 2.2 Mohm 1/16W	
R722L	963 9004 083	Carbon chip 100 kohm 1/16W	
R722R	963 9004 083	Carbon chip 100 kohm 1/16W	
R723L	963 9004 083	Carbon chip 100 kohm 1/16W	
R723R	963 9004 083	Carbon chip 100 kohm 1/16W	
R724L	963 9003 385	Carbon chip 100 ohm 1/16W	
R724R	963 9003 385	Carbon chip 100 ohm 1/16W	
R725L	963 9004 300	Carbon chip 39 kohm 1/16W	
R725R	963 9004 300	Carbon chip 39 kohm 1/16W	
R726L	963 9004 300	Carbon chip 39 kohm 1/16W	
R726R	963 9004 300	Carbon chip 39 kohm 1/16W	
R727L	963 9004 300	Carbon chip 39 kohm 1/16W	
R727R	963 9004 300	Carbon chip 39 kohm 1/16W	
R728L	963 9003 385	Carbon chip 100 ohm 1/16W	
R728R	963 9003 385	Carbon chip 100 ohm 1/16W	
R729L	963 9004 083	Carbon chip 100 kohm 1/16W	
R729R	963 9004 083	Carbon chip 100 kohm 1/16W	
R731	963 9005 668	Metal film 220 ohm 1W	
R732	963 9005 668	Metal film 220 ohm 1W	
R733	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R734	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R741	963 9004 339	Carbon chip 470 ohm 1/16W	
R742	963 9004 339	Carbon chip 470 ohm 1/16W	
R743	963 9004 339	Carbon chip 470 ohm 1/16W	
R751	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R752	963 9004 070	Carbon chip 10 kohm 1/16W	
R756	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R757	963 9004 070	Carbon chip 10 kohm 1/16W	
R761C	963 9003 385	Carbon chip 100 ohm 1/16W	
R761FL	963 9005 707	Carbon chip 3.6 kohm 1/16W	
R761FR	963 9005 707	Carbon chip 3.6 kohm 1/16W	
R761SL	963 9003 385	Carbon chip 100 ohm 1/16W	
R761SR	963 9003 385	Carbon chip 100 ohm 1/16W	
R761SW	963 9005 037	Carbon chip 3.9 kohm 1/16W	
R762FL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R762FR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R762SW	963 9004 449	Carbon chip 6.8 kohm 1/16W	
R763FL	963 9004 151	Carbon chip 15 kohm 1/16W	
R763FR	963 9004 151	Carbon chip 15 kohm 1/16W	

Ref. No.	Part No.	Part Name	Remarks
R763SW	963 9004 834	Carbon chip 5.6 kohm 1/16W	
R764FL	963 9004 410	Carbon chip 6.2 kohm 1/16W	
R764FR	963 9004 410	Carbon chip 6.2 kohm 1/16W	
R765FL	963 9004 151	Carbon chip 15 kohm 1/16W	
R765FR	963 9004 151	Carbon chip 15 kohm 1/16W	
R765SW	963 9004 478	Carbon chip 7.5 kohm 1/16W	
R766FL	963 9003 385	Carbon chip 100 ohm 1/16W	
R766FR	963 9003 385	Carbon chip 100 ohm 1/16W	
R766SW	963 9003 385	Carbon chip 100 ohm 1/16W	
R767FL	963 9004 083	Carbon chip 100 kohm 1/16W	
R767FR	963 9004 083	Carbon chip 100 kohm 1/16W	
R767SW	963 9004 083	Carbon chip 100 kohm 1/16W	
R771	963 9005 639	Metal film 100 ohm 1W	
R772	963 9005 639	Metal film 100 ohm 1W	
R773	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R774	963 9004 070	Carbon chip 10 kohm 1/16W	
R782C	963 9003 385	Carbon chip 100 ohm 1/16W	
R782FL	963 9003 385	Carbon chip 100 ohm 1/16W	
R782FR	963 9003 385	Carbon chip 100 ohm 1/16W	
R782SL	963 9003 385	Carbon chip 100 ohm 1/16W	
R782SR	963 9003 385	Carbon chip 100 ohm 1/16W	
R782SW	963 9003 385	Carbon chip 100 ohm 1/16W	
R783C	963 9004 355	Carbon chip 4.7 kohm 1/16W	
R783FL	963 9004 355	Carbon chip 4.7 kohm 1/16W	
R783FR	963 9004 355	Carbon chip 4.7 kohm 1/16W	
R783SL	963 9004 355	Carbon chip 4.7 kohm 1/16W	
R783SR	963 9004 355	Carbon chip 4.7 kohm 1/16W	
R783SW	963 9004 355	Carbon chip 4.7 kohm 1/16W	
R784C	963 9005 684	Carbon chip 13 kohm 1/16W	
R784FL	963 9004 478	Carbon chip 7.5 kohm 1/16W	
R784FR	963 9004 478	Carbon chip 7.5 kohm 1/16W	
R784SL	963 9005 684	Carbon chip 13 kohm 1/16W	
R784SR	963 9005 684	Carbon chip 13 kohm 1/16W	
R784SW	963 9004 122	Carbon chip 12 kohm 1/16W	
R786C	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R786FL	963 9005 671	Carbon chip 1.3 kohm 1/16W	
R786FR	963 9005 671	Carbon chip 1.3 kohm 1/16W	
R786SL	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R786SR	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R786SW	963 9005 008	Carbon chip 620 ohm 1/16W	
R787SW	963 9004 083	Carbon chip 100 kohm 1/16W	
R788C	963 9004 339	Carbon chip 470 ohm 1/16W	
R788FL	963 9004 339	Carbon chip 470 ohm 1/16W	
R788FR	963 9004 339	Carbon chip 470 ohm 1/16W	
R788SL	963 9004 339	Carbon chip 470 ohm 1/16W	
R788SR	963 9004 339	Carbon chip 470 ohm 1/16W	
R788SW	963 9003 398	Carbon chip 1 kohm 1/16W	
R791	963 9005 639	Metal film 100 ohm 1W	
R792	963 9005 639	Metal film 100 ohm 1W	

Ref. No.	Part No.	Part Name	Remarks
CAPACITORS GROUP			
C701L	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C701R	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C702L	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C702R	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C703L	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C703R	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C704L	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C704R	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C705L	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C705R	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C706L	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C706R	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C707L	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C707R	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C708L	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C708R	963 9004 575	Ceramic chip 100pF/50V	for E2,EK,EA
C711L	963 9004 698	Ceramic chip 0.01uF/50V	
C711R	963 9004 698	Ceramic chip 0.01uF/50V	
C713L	963 9005 765	Electrolytic 10uF/35V	
C713R	963 9005 765	Electrolytic 10uF/35V	
C714L	963 9003 152	Mylar film 0.068uF/100V	
C714R	963 9003 152	Mylar film 0.068uF/100V	
C715L	963 9003 152	Mylar film 0.068uF/100V	
C715R	963 9003 152	Mylar film 0.068uF/100V	
C716L	963 9005 765	Electrolytic 10uF/35V	
C716R	963 9005 765	Electrolytic 10uF/35V	
C721	963 9005 875	Electrolytic 47uF/25V	
C722	960 9004 602	Ceramic 0.047uF/50V	
C723	963 9005 875	Electrolytic 47uF/25V	
C724	960 9004 602	Ceramic 0.047uF/50V	
C725	963 9005 736	Mylar film 0.0047uF/100V	
C726	963 9005 736	Mylar film 0.0047uF/100V	
C727	963 9004 766	Mylar film 0.1uF/100V	
C728	963 9004 766	Mylar film 0.1uF/100V	
C729	963 9004 766	Mylar film 0.1uF/100V	
C730	963 9004 766	Mylar film 0.1uF/100V	
C731	963 9005 765	Electrolytic 10uF/35V	
C732	963 9005 765	Electrolytic 10uF/35V	
C733	963 9005 765	Electrolytic 10uF/35V	
C734	963 9005 765	Electrolytic 10uF/35V	
C735	963 9005 765	Electrolytic 10uF/35V	
C736	963 9005 765	Electrolytic 10uF/35V	
C741	963 9004 575	Ceramic chip 100pF/50V	
C742	963 9004 575	Ceramic chip 100pF/50V	
C743	963 9004 575	Ceramic chip 100pF/50V	
C751	963 9005 749	Electrolytic 1uF/50V	
C756	963 9005 749	Electrolytic 1uF/50V	
C761FL	963 9004 753	Ceramic chip 0.047uF/50V	
C761FR	963 9004 753	Ceramic chip 0.047uF/50V	
C761SW	963 9004 753	Ceramic chip 0.047uF/50V	
C762FL	963 9004 575	Ceramic chip 100pF/50V	

Ref. No.	Part No.	Part Name	Remarks	
C762FR	963 9004 575	Ceramic chip 100pF/50V		
C762SW	963 9004 575	Ceramic chip 100pF/50V		
C763FL	963 9004 753	Ceramic chip 0.047uF/50V		
C763FR	963 9004 753	Ceramic chip 0.047uF/50V		
C763SW	963 9004 753	Ceramic chip 0.047uF/50V		
C764FL	963 9004 627	Ceramic chip 33pF/50V		
C764FR	963 9004 627	Ceramic chip 33PF/50V		
C764SW	963 9004 643	Ceramic chip 47pF/50V		
C765FL	963 9005 765	Electrolytic 10uF/35V		
C765FR	963 9005 765	Electrolytic 10uF/35V		
C765SW	963 9005 765	Electrolytic 10uF/35V		
C771	963 9005 875	Electrolytic 47uF/25V		
C772	963 9005 875	Electrolytic 47uF/25V		
C773	963 9005 749	Electrolytic 1uF/50V		
C781C	963 9004 753	Ceramic chip 0.047uF/50V		
C781FL	963 9004 753	Ceramic chip 0.047uF/50V		
C781FR	963 9004 753	Ceramic chip 0.047uF/50V		
C781SL	963 9004 753	Ceramic chip 0.047uF/50V		
C781SR	963 9004 753	Ceramic chip 0.047uF/50V		
C781SW	963 9004 753	Ceramic chip 0.047uF/50V		
C782C	963 9005 914	Electrolytic 4.7uF/50V		
C782FL	963 9005 765	Electrolytic 10uF/35V		
C782FR	963 9005 765	Electrolytic 10uF/35V		
C782SL	963 9005 765	Electrolytic 10uF/35V		
C782SR	963 9005 765	Electrolytic 10uF/35V		
C782SW	963 9005 914	Electrolytic 4.7uF/50V		
C783C	963 9004 630	Ceramic chip 39pF/50V		
C783FL	963 9004 669	Ceramic chip 56pF/50V		
C783FR	963 9004 669	Ceramic chip 56pF/50V		
C783SL	963 9004 630	Ceramic chip 39pF/50V		
C783SR	963 9004 630	Ceramic chip 39pF/50V		
C783SW	963 9004 575	Ceramic chip 100pF/50V		
C786SW	963 9005 914	Electrolytic 4.7uF/50V		
C791	963 9005 875	Electrolytic 47uF/25V		
C792	963 9005 875	Electrolytic 47uF/25V		
OTHER PARTS GROUP				**Q'ty**
CN551	963 0096 809	12P shield wire		1
CN701	963 0086 204	19P connector socket		1
CN702	963 0085 302	17P connector socket		1
CN703	963 0085 409	10P connector socket		1
	960 0188 200	4P pin jack		1
	960 0188 307	6P pin jack		1
	963 0094 102	Plate input		1
	963 0094 005	Input cushion		1

DSP P.W.B. ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC802	963 0084 905	IC GP1FA502RZ	
IC803	963 0084 905	IC GP1FA502RZ	
IC804	963 0096 304	IC DSP MELODY 32 LQFP	
IC805	963 0095 703	IC M29W800AT	
IC806	963 0095 606	IC IS61LV6416-12T	
IC807	963 0096 100	IC LC89057W	
IC808	963 0096 207	IC AD1837	
IC809	963 0074 203	IC MM74LCX244WMX	
IC810	963 0074 203	IC MM74LCX244WMX	
IC811	963 0074 203	IC MM74LCX244WMX	
IC812	963 0074 300	IC MM74HCT244WMX	
IC813	963 0095 907	IC 74LCX02MTC	
IC814	960 0195 109	IC SN74LV00APW	
IC815A	963 0043 807	IC BA4510F-T1	
IC816A	963 0043 807	IC BA4510F-T1	
IC817A	963 0024 004	IC NJM2068M	
IC818A	963 0024 004	IC NJM2068M	
IC819A	963 0024 004	IC NJM2068M	
IC817	963 0085 001	IC GP1FA502TZ	
IC821	963 0096 003	IC 74LCX74MTC	
IC822	960 0159 501	IC KIA7805API	
IC823	963 0074 805	IC RC1117S33ST	
IC824	963 0074 708	IC RC1117S25T	
Q804C	960 0196 603	Transistor KTC2874B	
Q804FL	960 0196 603	Transistor KTC2874B	
Q804FR	960 0196 603	Transistor KTC2874B	
Q804SL	960 0196 603	Transistor KTC2874B	
Q804SR	960 0196 603	Transistor KTC2874B	
Q804SW	960 0196 603	Transistor KTC2874B	
Q805	963 0058 203	Transistor DTA114EK	
Q806	963 0058 203	Transistor DTC114EK	
Q807	963 0058 203	Transistor DTA114EK	
D801	963 0096 605	Diode 1N4148WS	
D806	963 0096 605	Diode 1N4148WS	
D807	963 0096 605	Diode 1N4148WS	
RESISTORS GROUP			
R803	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R841	963 9004 339	Carbon chip 470 ohm 1/16W	
R848	963 9003 385	Carbon chip 100 ohm 1/16W	
R850	963 9004 465	Carbon chip 75 ohm 1/16W	
R859L	963 9004 834	Carbon chip 5.6 kohm 1/16W	
R859R	963 9004 834	Carbon chip 5.6 kohm 1/16W	
R860L	963 9004 834	Carbon chip 5.6 kohm 1/16W	
R860R	963 9004 834	Carbon chip 5.6 kohm 1/16W	
R861L	963 9004 339	Carbon chip 470 ohm 1/16W	
R861R	963 9004 339	Carbon chip 470 ohm 1/16W	
R862L	963 9004 834	Carbon chip 5.6 kohm 1/16W	
R862R	963 9004 834	Carbon chip 5.6 kohm 1/16W	

Ref. No.	Part No.	Part Name	Remarks
R863L	963 9004 339	Carbon chip 470 ohm 1/16W	
R863R	963 9004 339	Carbon chip 470 ohm 1/16W	
R864C	963 9004 083	Carbon chip 100 kohm 1/16W	
R864FL	963 9004 083	Carbon chip 100 kohm 1/16W	
R864FR	963 9004 083	Carbon chip 100 kohm 1/16W	
R864L	963 9005 930	Carbon chip 750 kohm 1/10W	
R864R	963 9005 930	Carbon chip 750 kohm 1/10W	
R864SL	963 9004 083	Carbon chip 100 kohm 1/16W	
R864SR	963 9004 083	Carbon chip 100 kohm 1/16W	
R864SW	963 9004 083	Carbon chip 100 kohm 1/16W	
R866C	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R866FL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R866FR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R866SL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R866SR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R866SW	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R867C	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R867FL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R867FR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R867SL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R867SR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R867SW	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R868C	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R868FL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R868FR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R868SL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R868SR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R868SW	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R869C	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R869FL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R869FR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R869SL	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R869SR	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R869SW	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R870C	963 9003 398	Carbon chip 1 kohm 1/16W	
R870FL	963 9003 398	Carbon chip 1 kohm 1/16W	
R870FR	963 9003 398	Carbon chip 1 kohm 1/16W	
R870SL	963 9003 398	Carbon chip 1 kohm 1/16W	
R870SR	963 9003 398	Carbon chip 1 kohm 1/16W	
R870SW	963 9003 398	Carbon chip 1 kohm 1/16W	
R871C	963 9004 083	Carbon chip 100 kohm 1/16W	
R871FL	963 9004 083	Carbon chip 100 kohm 1/16W	
R871FR	963 9004 083	Carbon chip 100 kohm 1/16W	
R871SL	963 9004 083	Carbon chip 100 kohm 1/16W	
R871SR	963 9004 083	Carbon chip 100 kohm 1/16W	
R871SW	963 9004 083	Carbon chip 100 kohm 1/16W	
R872C	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R872FL	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R872FR	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R872SL	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R872SR	963 9004 216	Carbon chip 2.2 kohm 1/16W	
R872SW	963 9004 216	Carbon chip 2.2 kohm 1/16W	

Ref. No.	Part No.	Part Name	Remarks
R922	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R923	963 9004 410	Carbon chip 6.2 kohm 1/16W	
R931	963 9004 410	Carbon chip 6.2 kohm 1/16W	
R931L	963 9004 122	Carbon chip 12 kohm 1/16W	
R931R	963 9004 122	Carbon chip 12 kohm 1/16W	
R932	963 9004 342	Carbon chip 4.7 kohm 1/16W	
R932L	963 9004 164	Carbon chip 150 kohm 1/16W	
R932R	963 9004 164	Carbon chip 150 kohm 1/16W	
R938	963 9004 368	Carbon chip 470 kohm 1/16W	
R952	963 9003 385	Carbon chip 100 ohm 1/16W	
R953	963 9004 203	Carbon chip 220 ohm 1/16W	
R954	963 9004 096	Carbon chip 1 Mohm 1/16W	
R955	963 9004 070	Carbon chip 10 kohm 1/16W	
R956	963 9004 070	Carbon chip 10 kohm 1/16W	
R957	963 9004 070	Carbon chip 10 kohm 1/16W	
R958	963 9004 070	Carbon chip 10 kohm 1/16W	
R959	963 9004 070	Carbon chip 10 kohm 1/16W	
R960	963 9004 070	Carbon chip 10 kohm 1/16W	
R961	963 9004 070	Carbon chip 10 kohm 1/16W	
R962	963 9004 070	Carbon chip 10 kohm 1/16W	
R963	963 9004 070	Carbon chip 10 kohm 1/16W	
R964	963 9004 070	Carbon chip 10 kohm 1/16W	
R965	963 9004 070	Carbon chip 10 kohm 1/16W	
R966	963 9004 070	Carbon chip 10 kohm 1/16W	
R967	963 9004 070	Carbon chip 10 kohm 1/16W	
R968	963 9004 070	Carbon chip 10 kohm 1/16W	
R969	963 9004 070	Carbon chip 10 kohm 1/16W	
R970	963 9004 070	Carbon chip 10 kohm 1/16W	
R971	963 9004 070	Carbon chip 10 kohm 1/16W	
R972	963 9004 070	Carbon chip 10 kohm 1/16W	
R973	963 9004 070	Carbon chip 10 kohm 1/16W	
R974	963 9004 070	Carbon chip 10 kohm 1/16W	
R975	963 9004 070	Carbon chip 10 kohm 1/16W	
R976	963 9004 070	Carbon chip 10 kohm 1/16W	
R977	963 9004 070	Carbon chip 10 kohm 1/16W	
R978	963 9005 697	Carbon chip 2 kohm 1/16W	
R979	963 9003 385	Carbon chip 100 ohm 1/16W	
R981	963 9004 326	Carbon chip 47 ohm 1/16W	
R982	963 9004 326	Carbon chip 47 ohm 1/16W	
R983	963 9004 326	Carbon chip 47 ohm 1/16W	
R984	963 9004 326	Carbon chip 47 ohm 1/16W	
R985	963 9004 326	Carbon chip 47 ohm 1/16W	
R986	963 9004 326	Carbon chip 47 ohm 1/16W	
R987	963 9004 326	Carbon chip 47 ohm 1/16W	
R988	963 9004 326	Carbon chip 47 ohm 1/16W	
R989	963 9004 326	Carbon chip 47 ohm 1/16W	
R990	963 9004 326	Carbon chip 47 ohm 1/16W	
R991	963 9004 326	Carbon chip 47 ohm 1/16W	
R992	963 9004 326	Carbon chip 47 ohm 1/16W	
R993	963 9004 326	Carbon chip 47 ohm 1/16W	
R994	963 9004 326	Carbon chip 47 ohm 1/16W	
R995	963 9004 326	Carbon chip 47 ohm 1/16W	

Ref. No.	Part No.	Part Name	Remarks
R996	963 9004 326	Carbon chip 47 ohm 1/16W	
R997	963 9004 326	Carbon chip 47 ohm 1/16W	
R998	963 9004 070	Carbon chip 10 kohm 1/16W	
R999	963 9004 070	Carbon chip 10 kohm 1/16W	
R1000	963 9004 326	Carbon chip 47 ohm 1/16W	
R1001	963 9004 070	Carbon chip 10 kohm 1/16W	
R1002	963 9004 326	Carbon chip 47 ohm 1/16W	
R1003	963 9004 326	Carbon chip 47 ohm 1/16W	
R1004	963 9004 326	Carbon chip 47 ohm 1/16W	
R1005	963 9003 372	Carbon chip 0 ohm 1/16W	
R1006	963 9004 326	Carbon chip 47 ohm 1/16W	
R1007	963 9004 326	Carbon chip 47 ohm 1/16W	
R1012	963 9004 326	Carbon chip 47 ohm 1/16W	
R1021	963 9004 326	Carbon chip 47 ohm 1/16W	
R1022	963 9004 326	Carbon chip 47 ohm 1/16W	
R1023	963 9004 326	Carbon chip 47 ohm 1/16W	
R1024	963 9004 326	Carbon chip 47 ohm 1/16W	
R1025	963 9004 326	Carbon chip 47 ohm 1/16W	
R1027	963 9004 326	Carbon chip 47 ohm 1/16W	
R1029	963 9004 326	Carbon chip 47 ohm 1/16W	
R1030	963 9004 326	Carbon chip 47 ohm 1/16W	
R1031	963 9004 326	Carbon chip 47 ohm 1/16W	
R1032	963 9004 326	Carbon chip 47 ohm 1/16W	
R1033	963 9003 372	Carbon chip 0 ohm 1/16W	
R1034	963 9003 372	Carbon chip 0 ohm 1/16W	
R1035	963 9003 372	Carbon chip 0 ohm 1/16W	
R1036	963 9003 372	Carbon chip 0 ohm 1/16W	
R1037	963 9004 070	Carbon chip 10 kohm 1/16W	
R1038	963 9004 070	Carbon chip 10 kohm 1/16W	
R1039	963 9004 070	Carbon chip 10 kohm 1/16W	
R1040	963 9004 070	Carbon chip 10 kohm 1/16W	
R1041	963 9004 070	Carbon chip 10 kohm 1/16W	
R1043	963 9004 326	Carbon chip 47 ohm 1/16W	
R1044	963 9004 326	Carbon chip 47 ohm 1/16W	
R1045	963 9004 339	Carbon chip 470 ohm 1/16W	
CAPACITORS GROUP			
C801	963 9004 708	Ceramic chip 0.1uF/50V	
C802	963 9004 591	Ceramic chip 22pF/50V	
C803	963 9004 591	Ceramic chip 22pF/50V	
C805	963 9004 591	Ceramic chip 22pF/50V	
C810	963 9004 708	Ceramic chip 0.1uF/50V	
C811	963 9005 309	Electrolytic 47uF/10V	
C812	963 9004 708	Ceramic chip 0.1uF/50V	
C813	963 9005 309	Electrolytic 47uF/10V	
C814	963 9004 591	Ceramic chip 22pF/50V	
C817	963 9005 927	Electrolytic 0.1uF/50V	
C818	963 9004 698	Ceramic chip 0.01uF/50V	
C820	963 9005 309	Electrolytic 47uF/10V	
C821	963 9005 312	Electrolytic 100uF/10V	
C822	963 9004 708	Ceramic chip 0.1uF/50V	

Ref. No.	Part No.	Part Name	Remarks
C823	963 9005 752	Electrolytic 10uF/35V	
C825	963 9005 749	Electrolytic 1uF/50V	
C826	963 9005 752	Electrolytic 10uF/35V	
C835	963 9005 901	Electrolytic 470uF/10V	
C838	963 9004 708	Ceramic chip 0.1uF/50V	
C839	963 9004 708	Ceramic chip 0.1uF/50V	
C840	963 9004 698	Ceramic chip 0.01uF/50V	
C841	963 9005 846	Electrolytic 2.2uF/50V	
C842	963 9004 708	Ceramic chip 0.1uF/50V	
C843	963 9004 708	Ceramic chip 0.1uF/50V	
C844	963 9004 708	Ceramic chip 0.1uF/50V	
C845	963 9004 708	Ceramic chip 0.1uF/50V	
C846	963 9004 708	Ceramic chip 0.1uF/50V	
C847	963 9004 708	Ceramic chip 0.1uF/50V	
C848	963 9004 708	Ceramic chip 0.1uF/50V	
C849	963 9004 708	Ceramic chip 0.1uF/50V	
C850	963 9004 708	Ceramic chip 0.1uF/50V	
C851	963 9004 708	Ceramic chip 0.1uF/50V	
C852	963 9004 708	Ceramic chip 0.1uF/50V	
C853	963 9004 708	Ceramic chip 0.1uF/50V	
C854	963 9005 804	Electrolytic 100uF/25V	
C855	963 9005 804	Electrolytic 100uF/25V	
C856	963 9004 708	Ceramic chip 0.1uF/50V	
C857	963 9004 708	Ceramic chip 0.1uF/50V	
C858	963 9004 708	Ceramic chip 0.1uF/50V	
C859	963 9004 708	Ceramic chip 0.1uF/50V	
C860	963 9004 708	Ceramic chip 0.1uF/50V	
C861	963 9004 708	Ceramic chip 0.1uF/50V	
C862	963 9004 708	Ceramic chip 0.1uF/50V	
C863	963 9004 708	Ceramic chip 0.1uF/50V	
C864	963 9004 708	Ceramic chip 0.1uF/50V	
C864L	963 9005 862	Electrolytic 47uF/16V	
C864R	963 9005 862	Electrolytic 47uF/16V	
C865	963 9004 737	Ceramic chip 0.022uF/25V	
C865L	963 9005 723	Ceramic chip 120pF/50V	
C865R	963 9005 723	Ceramic chip 120pF/50V	
C866	963 9004 708	Ceramic chip 0.1uF/50V	
C868	963 9005 998	Ceramic chip 24pF/50V	
C869	963 9005 998	Ceramic chip 24pF/50V	
C869L	963 9004 575	Ceramic chip 100pF/50V	
C869R	963 9004 575	Ceramic chip 100pF/50V	
C870	963 9004 698	Ceramic chip 0.01uF/50V	
C871	963 9004 708	Ceramic chip 0.1uF/50V	
C871L	963 9009 500	Mylar film 0.001uF/100V	
C871R	963 9009 500	Mylar film 0.001uF/100V	
C872	963 9004 708	Ceramic chip 0.1uF/50V	
C873	963 9004 698	Ceramic chip 0.01uF/50V	
C873C	963 9004 672	Ceramic chip 680pF/50V	
C873FL	963 9004 672	Ceramic chip 680pF/50V	
C873FR	963 9004 672	Ceramic chip 680pF/50V	
C873SL	963 9004 672	Ceramic chip 680pF/50V	
C873SR	963 9004 672	Ceramic chip 680pF/50V	

Ref. No.	Part No.	Part Name	Remarks
C873SW	963 9004 672	Ceramic chip 680pF/50V	
C874	963 9004 698	Ceramic chip 0.01uF/50V	
C874C	963 9004 672	Ceramic chip 680pF/50V	
C874FL	963 9004 672	Ceramic chip 680pF/50V	
C874FR	963 9004 672	Ceramic chip 680pF/50V	
C874SL	963 9004 672	Ceramic chip 680pF/50V	
C874SR	963 9004 672	Ceramic chip 680pF/50V	
C874SW	963 9004 672	Ceramic chip 680pF/50V	
C875	963 9004 698	Ceramic chip 0.01uF/50V	
C875C	963 9005 752	Electrolytic 10uF/35V	
C875FL	963 9005 752	Electrolytic 10uF/35V	
C875FR	963 9005 752	Electrolytic 10uF/35V	
C875SL	963 9005 752	Electrolytic 10uF/35V	
C875SR	963 9005 752	Electrolytic 10uF/35V	
C875SW	963 9005 752	Electrolytic 10uF/35V	
C876C	963 9008 611	Mylar film 0.0033uF/100V	
C876FL	963 9008 611	Mylar film 0.0033uF/100V	
C876FR	963 9008 611	Mylar film 0.0033uF/100V	
C876SL	963 9008 611	Mylar film 0.0033uF/100V	
C876SR	963 9008 611	Mylar film 0.0033uF/100V	
C876SW	963 9008 611	Mylar film 0.0033uF/100V	
C880C	963 9005 752	Electrolytic 10uF/35V	
C880FL	963 9005 752	Electrolytic 10uF/35V	
C880FR	963 9005 752	Electrolytic 10uF/35V	
C880SL	963 9005 752	Electrolytic 10uF/35V	
C880SR	963 9005 752	Electrolytic 10uF/35V	
C880SW	963 9005 752	Electrolytic 10uF/35V	
C916	963 9004 708	Ceramic chip 0.1uF/50V	
C917	963 9005 752	Electrolytic 10uF/35V	
C925	963 9004 708	Ceramic chip 0.1uF/50V	
C926	963 9005 752	Electrolytic 10uF/35V	
C931	963 9004 698	Ceramic chip 0.01uF/50V	
C937	963 9005 752	Electrolytic 10uF/35V	
C938	963 9005 749	Electrolytic 1uF/50V	
C939	963 9004 698	Ceramic chip 0.01uF/50V	
C943	963 9005 927	Electrolytic 0.1uF/50V	
C944	963 9004 698	Ceramic chip 0.01uF/50V	
C946	963 9004 708	Ceramic chip 0.1uF/50V	
C947	963 9004 708	Ceramic chip 0.1uF/50V	
C948	963 9005 752	Electrolytic 10uF/35V	
C949	963 9005 752	Electrolytic 10uF/35V	
C950	963 9004 708	Ceramic chip 0.1uF/50V	
C951	963 9005 901	Electrolytic 470uF/10V	
C952	963 9004 708	Ceramic chip 0.1uF/50V	
C953	963 9005 752	Electrolytic 10uF/35V	
C955	963 9004 708	Ceramic chip 0.1uF/50V	
C957	963 9004 708	Ceramic chip 0.1uF/50V	
C958	963 9005 312	Electrolytic 100uF/10V	
C959	963 9005 752	Electrolytic 10uF/35V	
C960	963 9004 708	Ceramic chip 0.1uF/50V	
C961	963 9005 752	Electrolytic 10uF/35V	

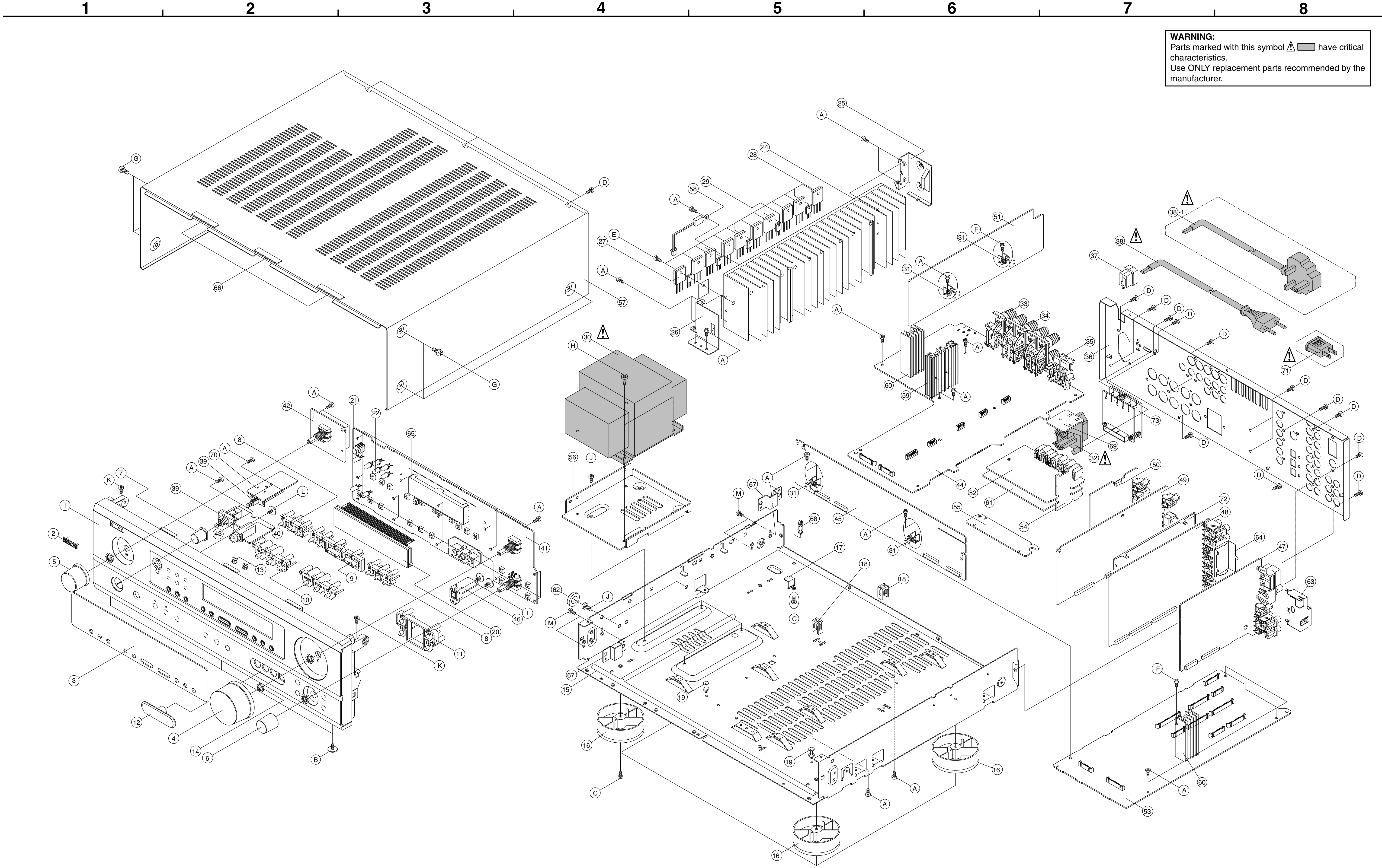
Ref. No.	Part No.	Part Name	Remarks	
C962	963 9004 708	Ceramic chip 0.1uF/50V		
C965	963 9004 708	Ceramic chip 0.1uF/50V		
C966	963 9005 901	Electrolytic 470uF/10V		
C967	963 9004 708	Ceramic chip 0.1uF/50V		
OTHER PARTS GROUP				**Q'ty**
CB803	963 0050 502	Chip emifil		1
CB805-810	963 0050 502	Chip emifil		6
CN801	963 0086 107	16P connector socket		1
CN802	963 0086 204	19P connector socket		1
CN803	963 0097 206	8P connector socket		1
JACK801	963 0052 500	Coaxial		1
L802	963 0050 803	Inductor 4.7uh		1
L805,806	963 0050 803	Inductor 4.7uh		2
L807	963 0050 900	Inductor 2.2uh		1
XTAL1	963 0095 101	Crystal 12.288MHz		1

VOLTAGE SEL. P.W.B. ASS'Y
(for Asia, Hong Kong & Taiwan R.O.C. model only)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
OTHER PARTS GROUP (E1,G1H,G1T model only)				
CP901	963 0061 203	5P connector base	for E1,E1H,E1T	1
CP902	963 0059 309	3P wire	for E1,E1H,E1T	1
CN105	963 0059 105	2P wire	for E1,E1H,E1T	1
CN903	963 0058 805	2P wire	for E1,E1H,E1T	1
⚠ F101	960 0142 602	Fuse 250V-T2.5A	for E1,E1H,E1T	1
F101A	960 0005 804	Fuse clip	for E1,E1H,E1T	1
F101B	960 0005 804	Fuse clip	for E1,E1H,E1T	1
⚠ F102	963 0057 107	Fuse 250V-T6.3A	for E1,E1H,E1T	1
F102A	960 0005 804	Fuse clip	for E1,E1H,E1T	1
F102B	960 0005 804	Fuse clip	for E1,E1H,E1T	1
⚠ F901	963 0044 709	Fuse 250V-T3.15A	for E1,E1H,E1T	1
F901A	960 0005 804	Fuse clip	for E1,E1H,E1T	1
F901B	960 0005 804	Fuse clip	for E1,E1H,E1T	1
⚠ JK911	960 0143 203	AC outlet	for E1,E1H,E1T	1
JK912	963 0056 904	Slide SW	for E1,E1H,E1T	1
	963 0051 103	Card spacer	for E1,E1H,E1T	1
	963 0044 602	P.C. supporter	for E1,E1H,E1T	2

EXPLODED VIEW

WARNING:
Parts marked with this symbol ⚠ ▭ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.



Note : The symbols in the column "Remarks" indicate the following destinations.

E3 : U.S.A. & Canada model	E1 : Asia model
EU : U.S.A. model (AVR-683)	E1C : China model
E2 : Europe model	E1H : Hong Kong model
EK : U.K. model	E1T : Taiwan R.O.C. model
EA : Australia model	E1K : Korea model

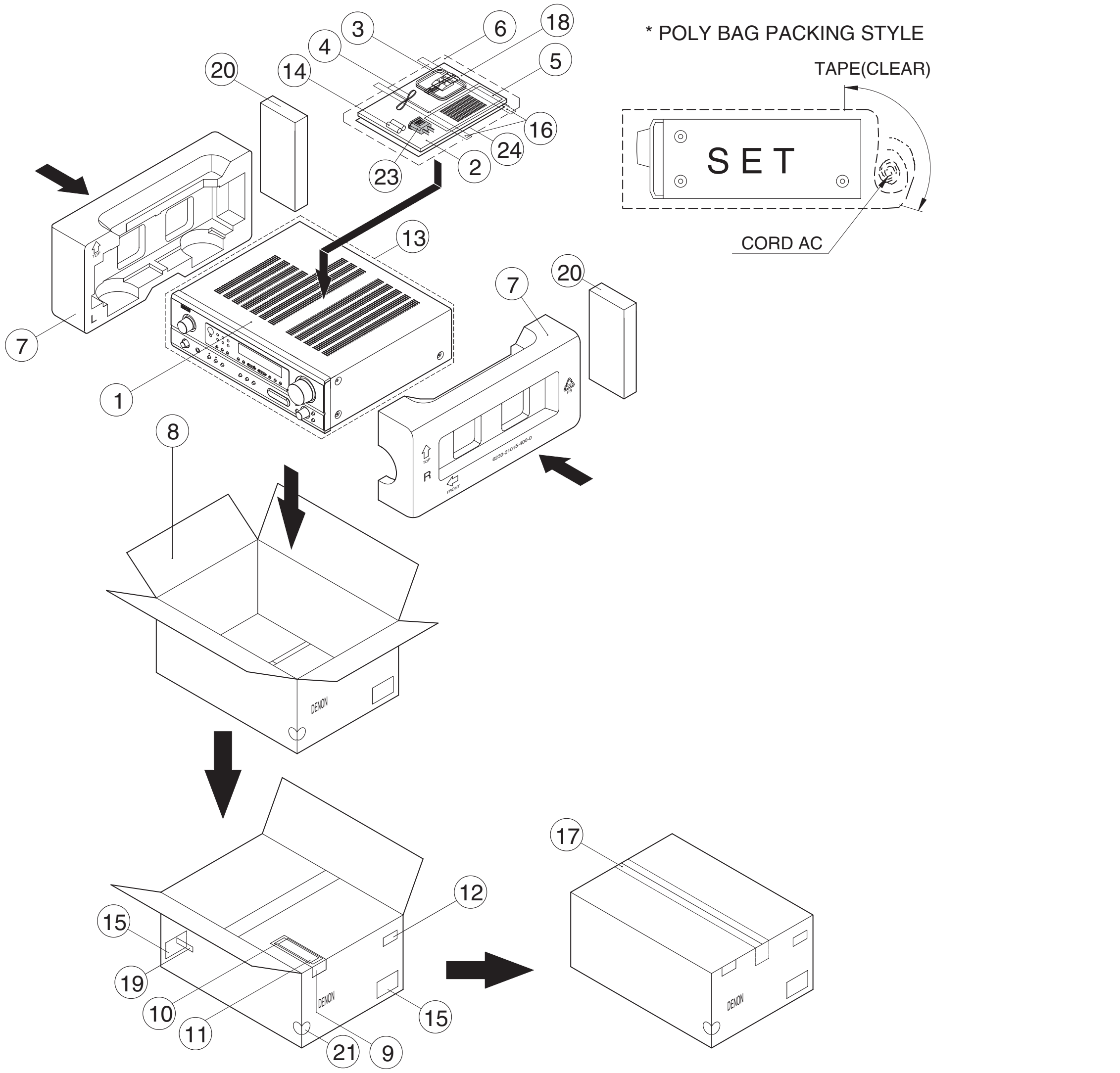
PARTS LIST OF EXPLODED VIEW

Ref. No.	Part No.	Part Name	Remarks	Q'ty
	963 0092 010	Main P.W.B. Total Ass'y	for E3,EU	1
	963 0092 023		for E2,EK,EA	
	963 0092 036		for E1,E1T,E1H	
	963 0092 049		for E1C	
	963 0092 052		for E1K	
44		Main P.W.B. Sub Ass'y		
50		Video P.W.B. Sub Ass'y		
55		Video CNT P.W.B. Sub Ass'y		
69		Outlet P.W.B. Sub Ass'y	for E2,E1,E1T,E1H,E1K	
	963 0092 117	CPU P.W.B. Total Ass'y	for E3,EU	1
	963 0092 120		for E2,EK,EA	
	963 0092 133		for E1,E1T,E1H	
	963 0092 146		for E1C	
	963 0092 159		for E1K	
41		Front P.W.B. Sub Ass'y		
46		Optical-In P.W.B. Sub Ass'y		
53		CPU P.W.B. Sub Ass'y		
70		Power-Sw P.W.B. Sub Ass'y	for E2,EK,EA,E1 E1C,E1T,E1H,E1K	
	963 0094 403	Voltage Sel P.W.B. Total Ass'y	for E1,E1T,E1H	1
73		Voltage Sel P.W.B. Sub Ass'y		
	963 0092 214	CNT P.W.B. Total Ass'y	for E3,EU	1
	963 0092 227		for E2,EK,EA	
	963 0092 230		for E1,E1T,E1H	
	963 0092 243		for E1C	
	963 0092 256		for E1K	
42		Encoder P.W.B. Sub Ass'y		
43		Head Phone P.W.B. Sub Ass'y		
45		CNT P.W.B. Sub Ass'y		
47		Tuner P.W.B. Sub Ass'y		
51		Pre-Amp P.W.B. Sub Ass'y		
52		S-Video P.W.B. Sub Ass'y		
54		S-Video CNT P.W.B. Sub Ass'y		
61		C-Video P.W.B. Sub Ass'y	for E3,EU	
	963 0092 311	Input-Vol P.W.B. Total Ass'y	for E3,EU	1
	963 0092 324		for E2,EK,EA	
	963 0092 337		for E1,E1T,E1H	
	963 0092 340		for E1C	
	963 0092 353		for E1K	
48		Input-Vol P.W.B. Sub Ass'y		
	963 0092 418	DSP P.W.B. Total Ass'y	for E3,EU	1
	963 0092 421		for E2,EK,EA	
	963 0092 434		for E1,E1T,E1H	
	963 0092 447		for E1C	
	963 0092 450		for E1K	
49		DSP P.W.B. Sub Ass'y		
1	963 0093 019	Front Panel	for E3	1
	963 0093 022	Front Panel	for EU	1
	963 0093 035	Front Panel	for E2,EK,EA	1
	963 0093 048	Front Panel	for E1,E1C,E1T, E1H,E1K	1
2	963 0051 501	DENON Badge	for black model	1
	963 0051 514	DENON Badge	for gold model	1
3	963 0093 116	Window	for E3,EU,E1,E1C,E1T,E1H,E1K	1
	963 0093 129	Window	for E2,EK,EA	1
4	963 0093 213	Volume Knob	for black model	1
	963 0093 200	Volume Knob	for gold model	1
5	963 0093 310	Function Knob	for black model	1
	963 0093 307	Function Knob	for gold model	1
6	963 0093 417	Select Knob	for black model	1
	963 0093 420	Select Knob	for gold model	1
7	963 0093 514	Power Push Button	for black model	1
	963 0093 501	Power Push Button	for gold model	1
8	963 0094 801	3key(A) Button		2
9	963 0098 205	6key Button		1
10	963 0094 610	3key(B) Button	for black model	2
	963 0094 607	3key(B) Button	for gold model	2
11	963 0094 717	4key Button	for black model	1
	963 0094 704	4key Button	for gold model	1
12	963 0098 302	RCA Cover	for E2,EK,EA,E3,EU	1
13	960 0191 417	Lens LED		2
14	963 0092 900	Knob Spring		1
15	963 0098 108	Main Chassis		1
16	960 0183 904	Foot Ass'y		4
17	960 0184 107	Bracket Supporter		1
18	960 0003 301	Supporter P.W.B.		2
19	963 0051 103	Card Spacer		2
20	960 0180 509	Display FLT 16-ST-42GNK		1
21	960 0181 100	Remocon Module		1
22	960 0197 204	LED HL50RDRF4T		8
24	—	Main Heat Sink	for E3,EU	1
		Main Heat Sink	for E2,EK,EA,E1, E1C,E1T,E1H,E1K	1
25	960 0184 204	Heat Sink-B Bracket		1
26	960 0184 301	Heat Sink-F Bracket		1
27	963 0044 107	Transistor 2SB1560-Y	for E3,EU	5
	960 0090 107	Transistor 2SB1559Y	for E2,EK,EA,E1, E1C,E1T,E1H,E1K	5
28	963 0044 204	Transistor 2SD2390-Y	for E3,EU	5
	960 0090 000	Transistor 2SD2389Y	for E2,EK,EA,E1, E1C,E1T,E1H,E1K	5
29	963 0058 106	Transistor 2SD947F		5
⚠ 30	963 0098 506	Power Trans	for E3,EU	1
	963 0098 409	Power Trans	for E2,EK,EA	1
	963 0098 412	Power Trans	for E1,E1T,E1H	1
	963 0098 425	Power Trans	for E1K,E1C	1
31	960 0184 000	Bracket Screw		2
⚠ 32	960 0181 508	AC Outlet(2P)	for E3,EU	1
	960 0143 203	AC Outlet	for E2,EK,EA,E1,E1T,E1H	1
	960 0144 202	AC Outlet	for E1K	1
33	960 0194 809	2P Pin Jack		1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
34	963 0074 009	8P Pin Jack		1
35	960 0158 308	Push SW Block		1
36	963 0092 719	Back Chassis	for E3	1
	963 0092 722	Back Chassis	for EU	1
	963 0092 735	Back Chassis	for E2,EK,EA	1
	963 0092 748	Back Chassis	for E1,E1T,E1H	1
	963 0092 751	Back Chassis	for E1K	1
	963 0092 764	Back Chassis	for E1C	1
37	960 0192 403	AC Cord Stopper		1
⚠ 38	963 0098 603	Cord Ass'y	for E3,EU	1
	960 0202 500	Cord Ass'y	for E2	1
	963 0099 602	Cord Ass'y	for EA	
	963 0060 408	Cord Ass'y	for E1,E1T	1
	960 0143 009	Cord Ass'y	for EK,E1H	1
	963 0098 700	Cord Ass'y	for E1K	1
	963 0060 301	Cord Ass'y	for E1C	1
39	960 0176 209	Push SW	for E3,EU	1
	963 0098 807	Push SW	for E2,EK,EA,E1, E1C,E1T,E1H,E1K	1
40	963 0095 402	Head Phone Jack		1
56	963 0098 904	Trans Bracket		1
57	963 0053 017	Top Cabinet	for black model	1
	963 0092 502	Top Cabinet	for gold model	1
58	960 0187 900	Posistor		1
59	—	Heat Sink Reg TR		1
60	—	Heat Sink Reg TR		1
62	963 0072 302	Rubber Cushion		2
63	963 0054 003	Shield Tuner Pack		1
64	963 0099 000	Earth "D"Plate		1
65	960 0184 408	Flt Holder		1
66	963 0089 104	Rubber Sheet (Cabinet)		3
67	963 0081 607	Side Bracket	for E2,EK,EA,E1, E1C,E1T,E1H,E1K	2
68	963 0044 602	Supporter P.C.		1
71	963 0041 300	AC Adapter	for E1T	1
72	963 0094 102	Plate Input		1
★	960 0155 301	Clamp		4
★	960 0093 104	Bushing Terminal		10
★	963 0098 001	Cable Flat Card	for E3,EU,E2,EK,E1,E1C,E1K	1
★	963 0054 207	Fuse Caution Label	for E3,EU	1
★	963 0060 000	Fuse Caution Label	for E2,EK,EA,E1K	1
★	963 0090 504	Fuse Caution Label	for E1C	1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
SCREWS				
A	963 0018 007	Screw,Tap Tite 3x8 B-Type Zny/Bh	for E3,EU,E2,EK,EA	44
	963 0018 007	Screw,Tap Tite 3x8 B-Type Zny/Bh	for E1,E1C,E1T,E1H,E1K	41
B	960 9008 527	Screw 3x8 Bk Washer Pi12	for E3,EU,E2,EK,EA	4
	960 9008 420	Screw 3x8 Zny Washer Pi12	for E1,E1C,E1T,E1H,E1K	7
C	963 0048 200	Screw,Tap Tite 3x10 B-Type Zny/Bh		5
D	960 0108 714	Screw,Tap Tite 3x10 B-Type(Dot) Bk/Bh	for E3,EU,E2,EK,EA	40
	960 0108 714	Screw,Tap Tite 3x10 B-Type(Dot) Bk/Bh	for E1,E1C,E1T,E1H,E1K	42
E	963 9004 009	Screw,Tapping Ass'y		15
F	963 0018 104	Screw,Tap Tite 3x17 B-Type Zny/Bh		4
G	963 0048 307	Screw 4x8 B-Type(Dot) Bk/Bh	for black model	6
	963 9004 012	Screw 4x8 B-Type(Dot) Ni/Bh	for gold model	6
H	960 9008 417	Screw,Tap Tite 4x8 P+S-Washer Zny/Bh		4
J	963 9004 025	Screw,Tap Tite 4x6 S-Type Zny/Bh		6
K	963 9004 038	Screw 3x8 B-Type Zny		2
L	960 9008 420	Screw 3x8 Zny Washer Pi12	for E3,EU,E2,EK,EA	3
	960 9008 420	Screw 3x8 Zny Washer Pi12	for E1,E1C,E1T,E1H,E1K	7
M	963 9004 041	Screw 3x5 Zny/Bh	for E2,EK,EA,E1, E1T,E1K,E1H,E1C	4

PACKING VIEW

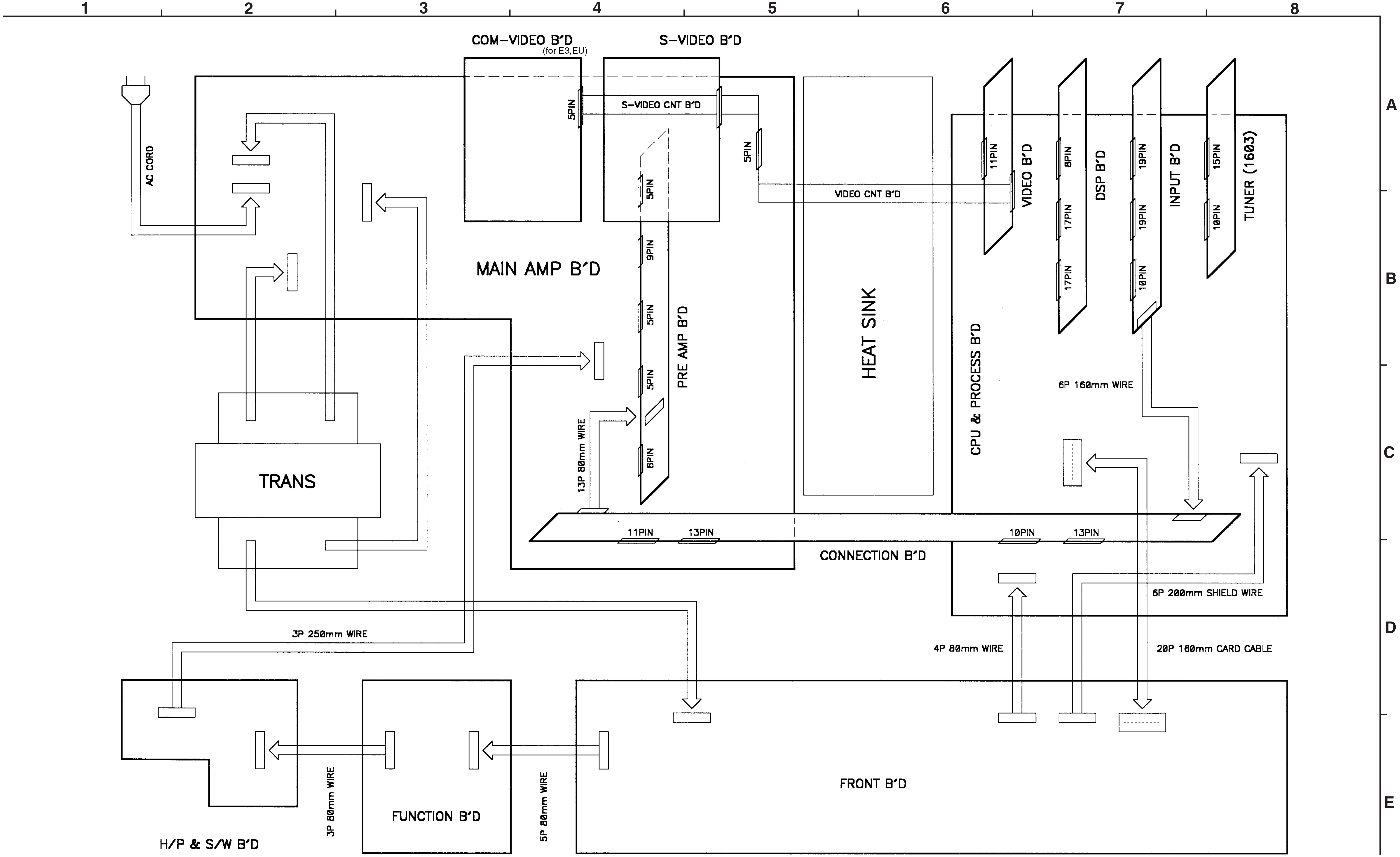


Note : The symbols in the column "Remarks" indicate the following destinations.
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EK : U.K. model
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E1C : China model
E1H : Hong Kong model
E1T : Taiwan R.O.C. model
E1K : Korea model

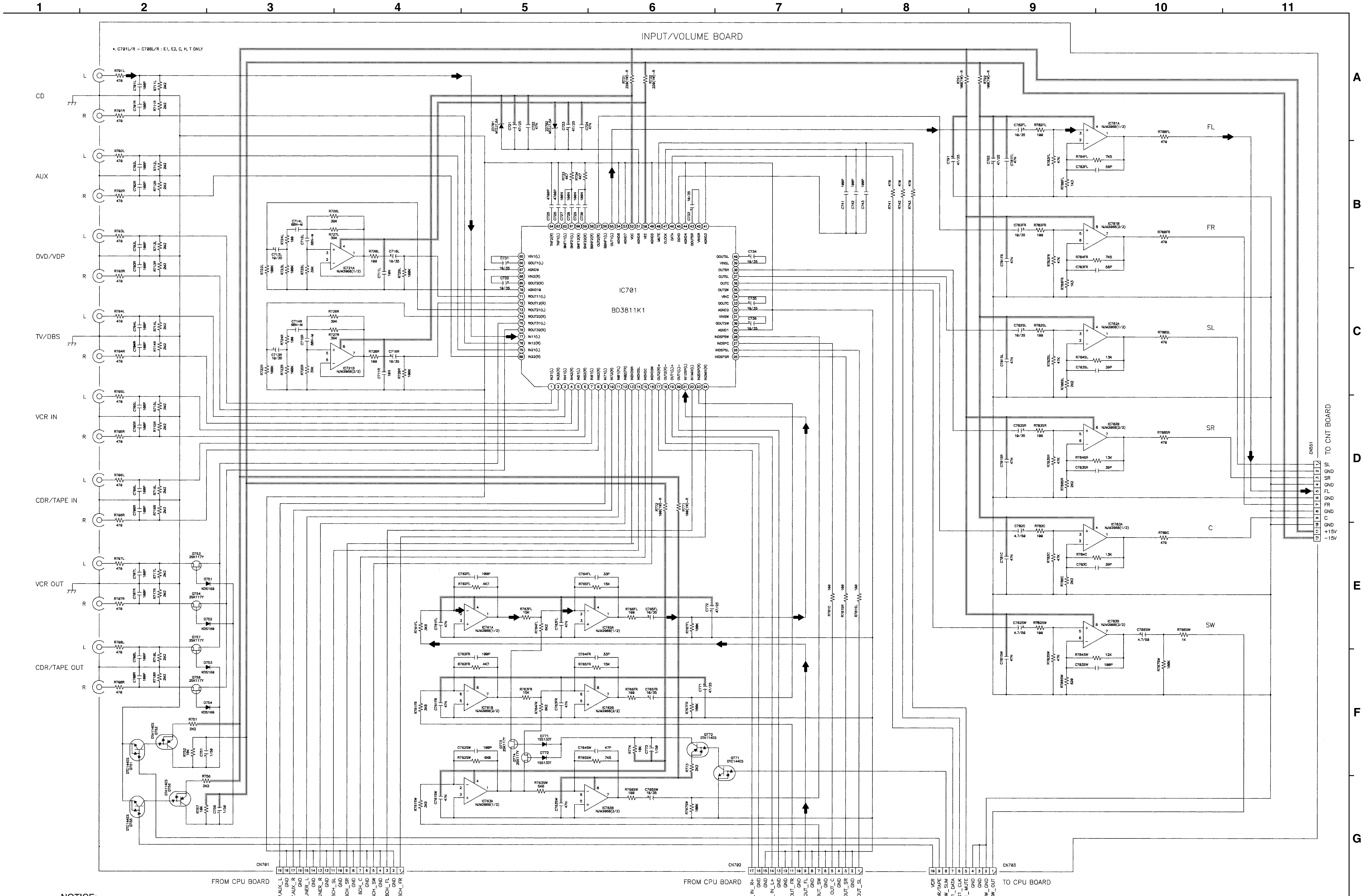
PARTS LIST OF PACKING & ACCESSORIES

Ref. No.	Part No.	Part Name	Remarks	Q'ty
2	963 0091 011	Instruction manual	for E3,EU	1
	963 0091 024	Instruction manual	for E2,EK,EA	1
	963 0091 037	Instruction manual	for E1,E1H,E1T	1
	963 0091 040	Instruction manual	for E1C	1
	963 0091 053	Instruction manual	for E1K	
3	963 0052 306	AM antenna wire		1
4	963 0052 209	FM antenna wire		1
5	963 0091 105	Remocon RC920		1
6	963 0045 106	Poly bag		1
7	960 0193 101	Cushion snow L/R		1
8	963 0091 215	Carton case	for E3,E2	1
	963 0091 228	Carton case	for EU	1
	963 0091 231	Carton case	for EK,EA	1
	963 0091 244	Carton case	for E1,E1C,E1T,E1K	1
	963 0091 257	Carton case	for E1H	1
9	—	Card envelope(warranty)	for E3,EU	1
10	—	Warranty card	for E3,EU	1
11	960 0185 300	Registration card	for E3,EU	1
12	—	UPC label	for E3	1
	—	UPC label	for EU	1
	—	Label E2 pos	for E2	1
	—	Label Ek pos	for EK	2
13	960 0185 601	Set poly bag		1
14	—	Battery		2
15	930 0092 901	Control label		2
16	—	Tape		1
17	—	Tape packing		1
18	—	Card S. S. List		1
19	—	Label (RDS/Radio text)	for E2,EK,EA	1
20	963 0055 918	Pad snow	for EK,EA,E1H	2
21	—	Label color	for gold model	2
⚠ 23	963 0061 300	AC adapter	for E1T	1
★	—	Label kolin (rating)	for E1T	1
★	—	Label kolin (box)	for E1T	1
★	—	Box label	for E1C	1
★	—	Card warranty	for E1K	1
★	963 0025 809	Preset label	for E1,E1T,E1H	1
★	—	Serial No. Label		1

WIRING DIAGRAM



SCHEMATIC DIAGRAMS (1/8)



NOTICE:
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASUERD AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:
Parts marked with this symbol ⚠ have critical characteristics.
Use ONLY replacement parts recommended by the manufacture.

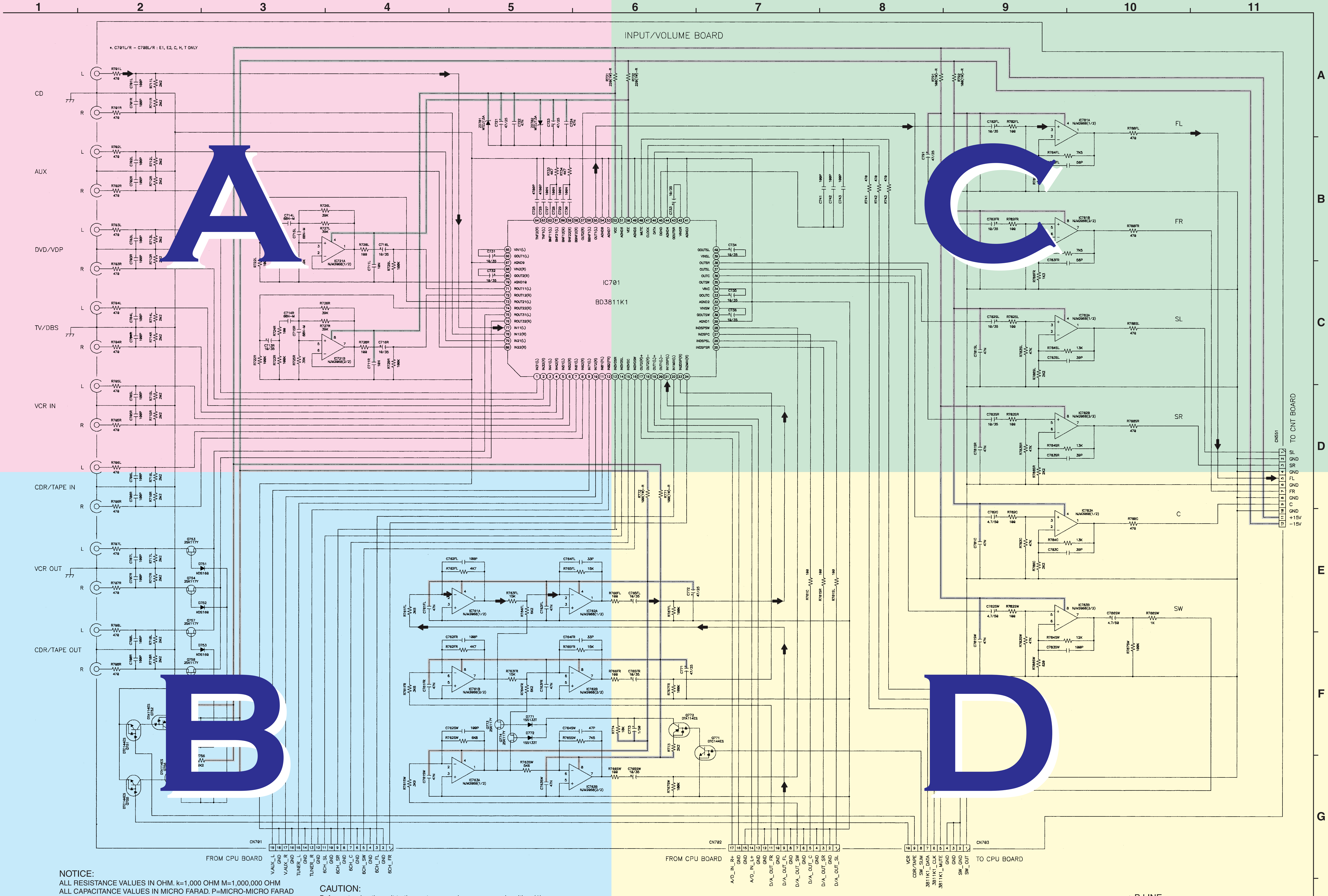
CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

± B LINE
SIGNAL LINE

SCHEMATIC DIAGRAMS (1/8)
INPUT-VOL UNIT

SCHEMATIC DIAGRAMS (1/8)



NOTICE:
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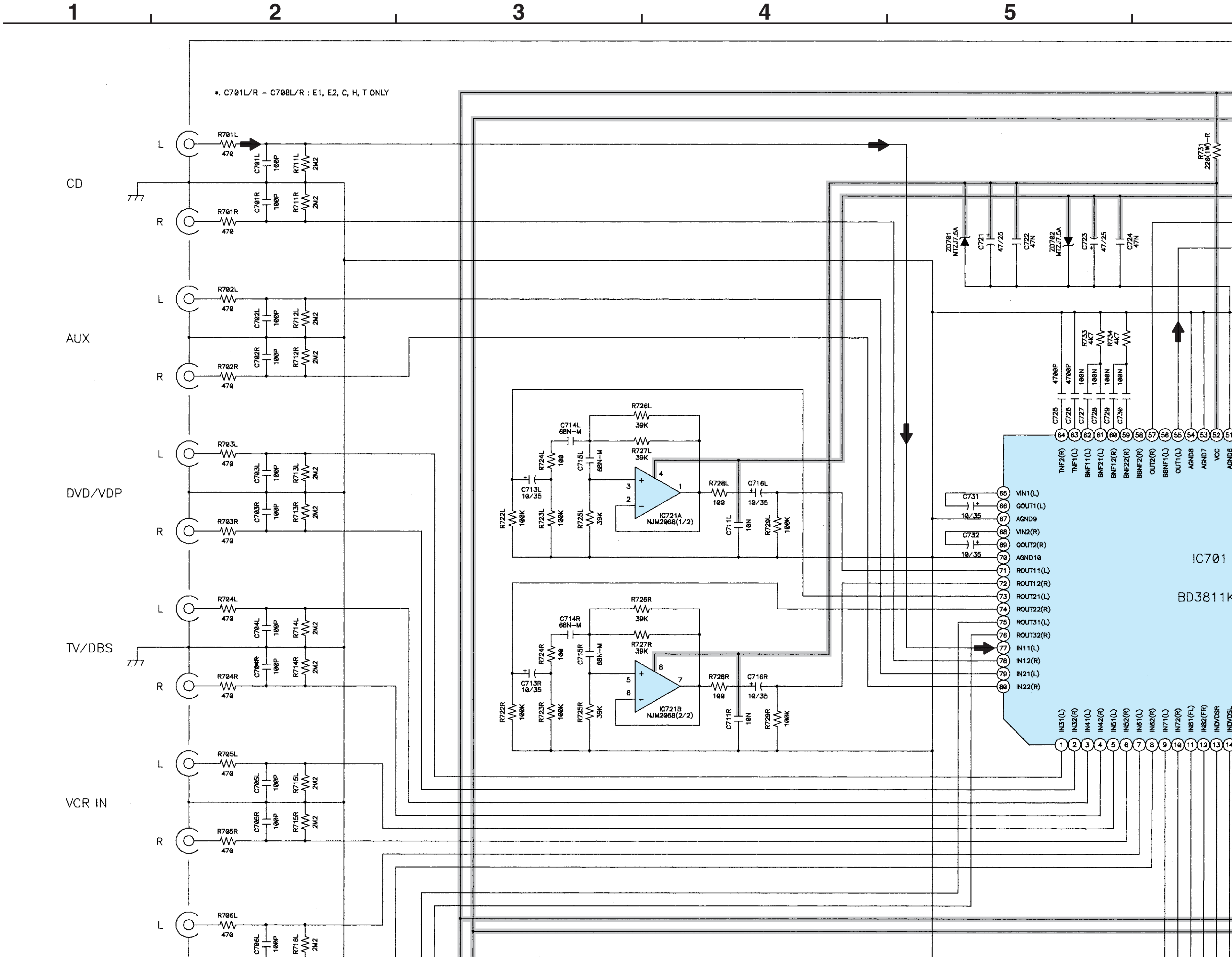
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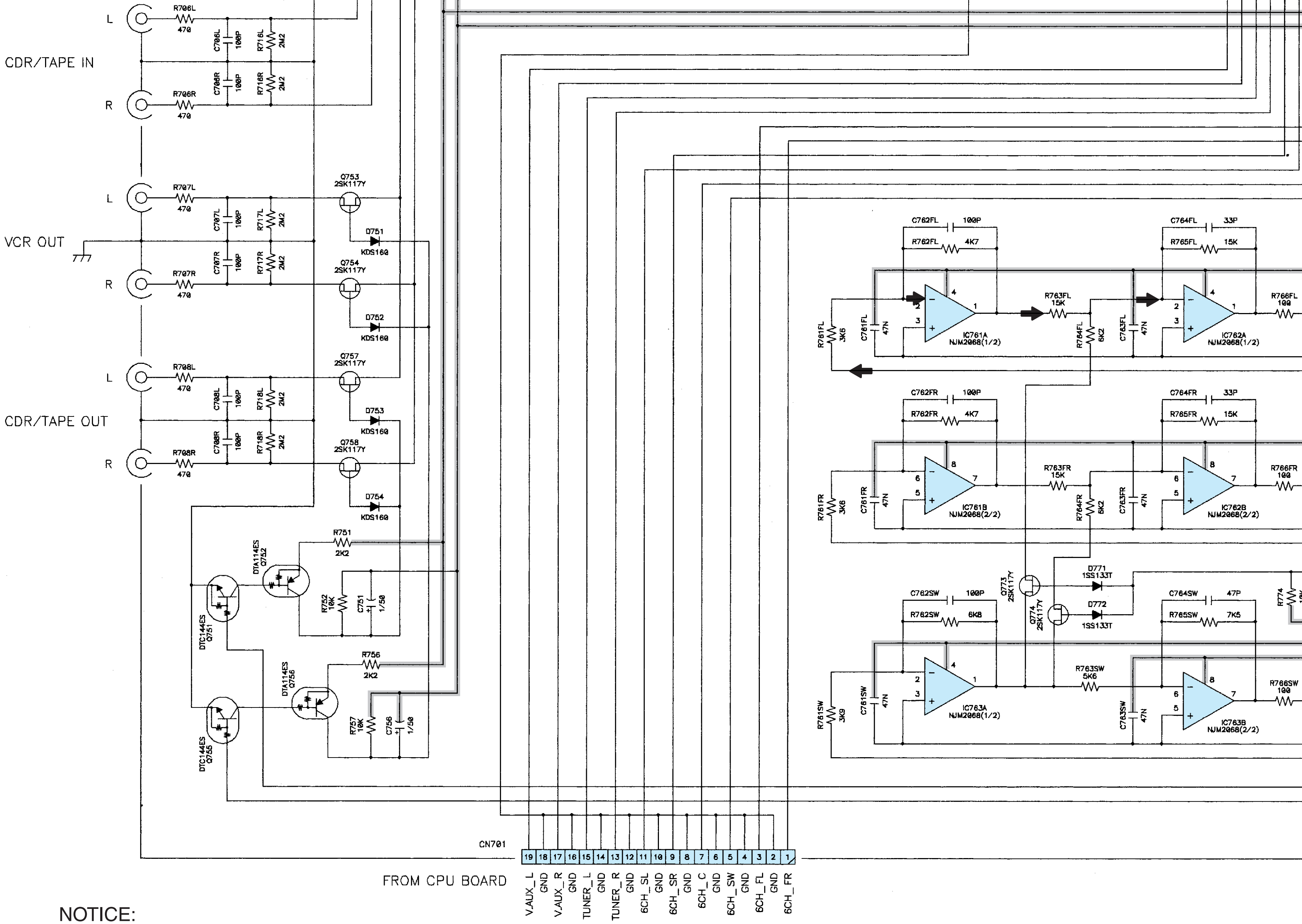
WARNING:
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± B LINE
SIGNAL LINE

SCHEMATIC DIAGRAMS (1/8)
INPUT-VOL UNIT

SCHEMATIC DIAGRAMS (1/8)





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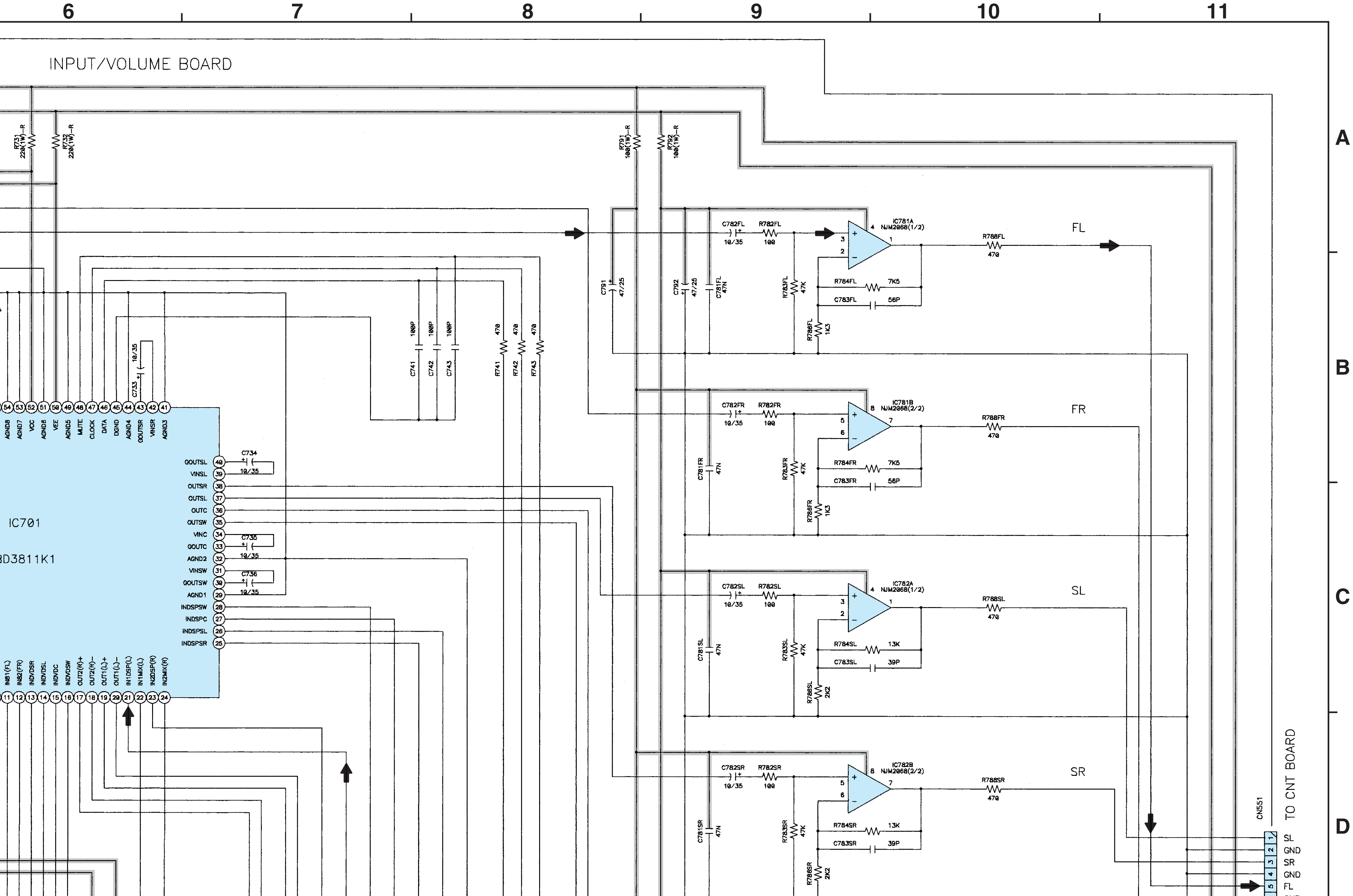
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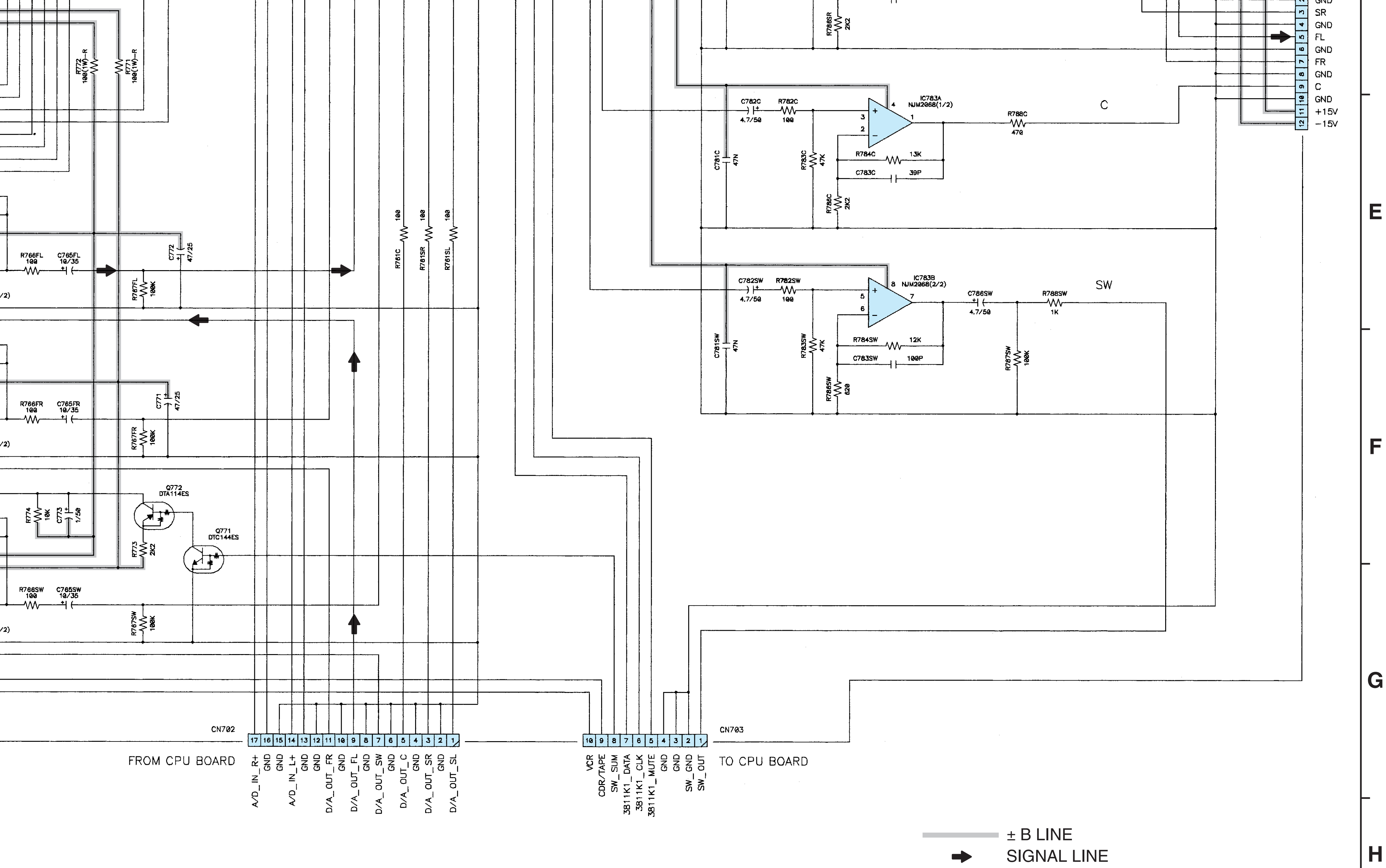
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WARNING:

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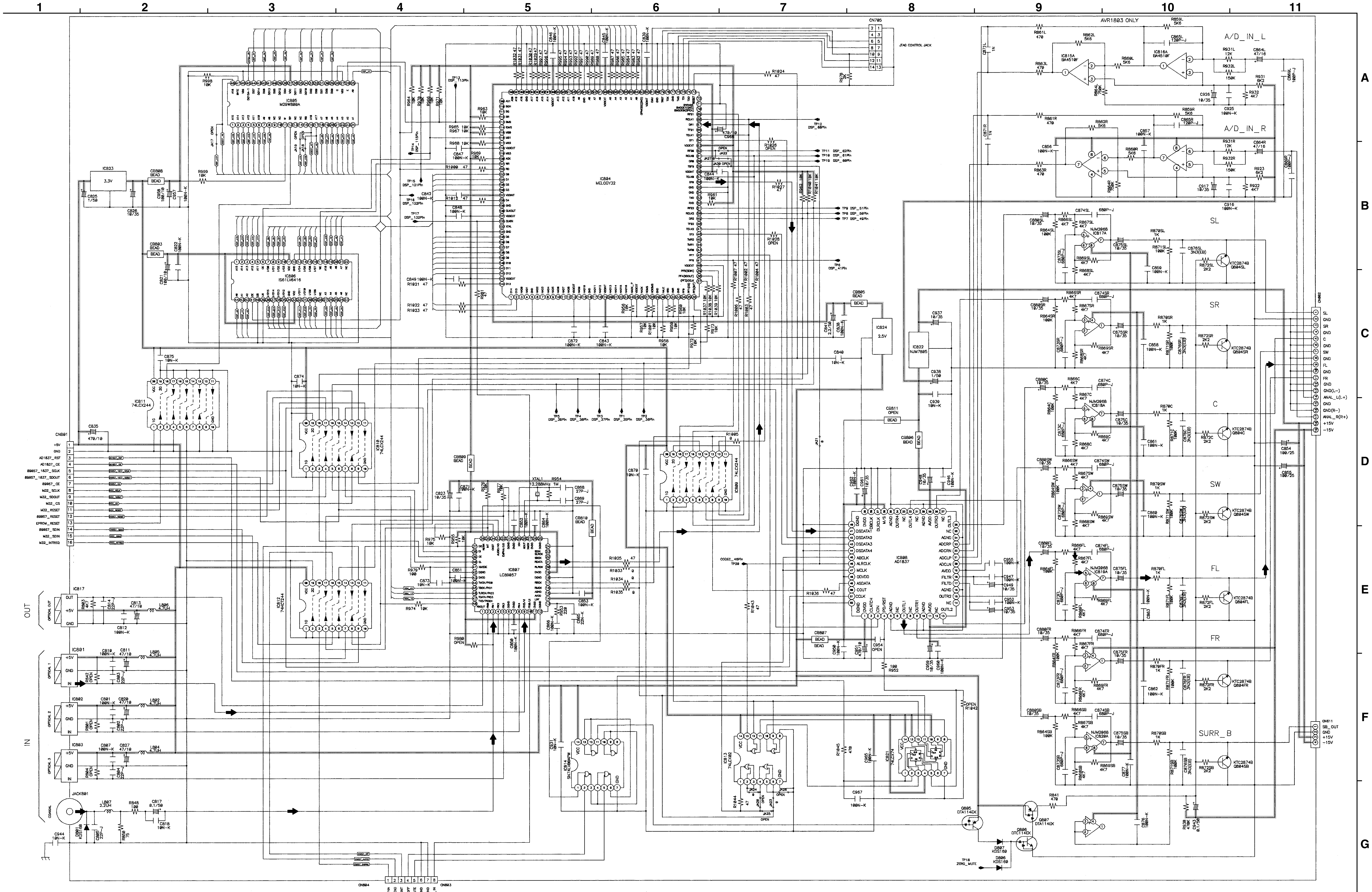

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A
B
C
D
INPUT/VOLUME BOARD
IC701
BD3811K1
R731 220(1W)-R
R732 220(1W)-R
R791 100(1W)-R
R792 100(1W)-R
C733 10/35
C734 10/35
C735 10/35
C736 10/35
C741 100P
C742 100P
C743 100P
R741 470
R742 470
R743 470
C791 47/25
C792 47/25
C781FL 47N
C782FL 10/35
R782FL 100
R783FL 47K
R784FL 7K5
C783FL 56P
R786FL 1K3
IC781A NJM2068(1/2)
R788FL 470
FL
C781FR 47N
C782FR 10/35
R782FR 100
R783FR 47K
R784FR 7K5
C783FR 56P
R786FR 1K3
IC781B NJM2068(2/2)
R788FR 470
FR
C781SL 47N
C782SL 10/35
R782SL 100
R783SL 47K
R784SL 13K
C783SL 39P
R786SL 2K2
IC782A NJM2068(1/2)
R788SL 470
SL
C781SR 47N
C782SR 10/35
R782SR 100
R783SR 47K
R784SR 13K
C783SR 39P
R786SR 2K2
IC782B NJM2068(2/2)
R788SR 470
SR
AGND8 AGND7 VCC AGND6 VEE AGND5 MUTE CLOCK DATA DGND AGND4 GOUTSR VINSR AGND3
GOUTSL VINSL OUTSR OUTSL OUTC OUTSW VINC GOUTC AGND2 VINSW GOUTSW AGND1 INDSPSW INDSPC INDSPSL INDSPSR
INB1(FL) INB2(FR) INDVDSR INDVDSL INDVDC INDVDSW OUT2(R)+ OUT2(R)− OUT1(L)+ OUT1(L)− IN1DSP(L) IN1MIX(L) IN2DSP(R) IN2MIX(R)
CN551
TO CNT BOARD
SL
GND
SR
GND
FL



SCHEMATIC DIAGRAMS (1/8)

INPUT-VOL UNIT

SCHEMATIC DIAGRAMS (2/8)



NOTICE:
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CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

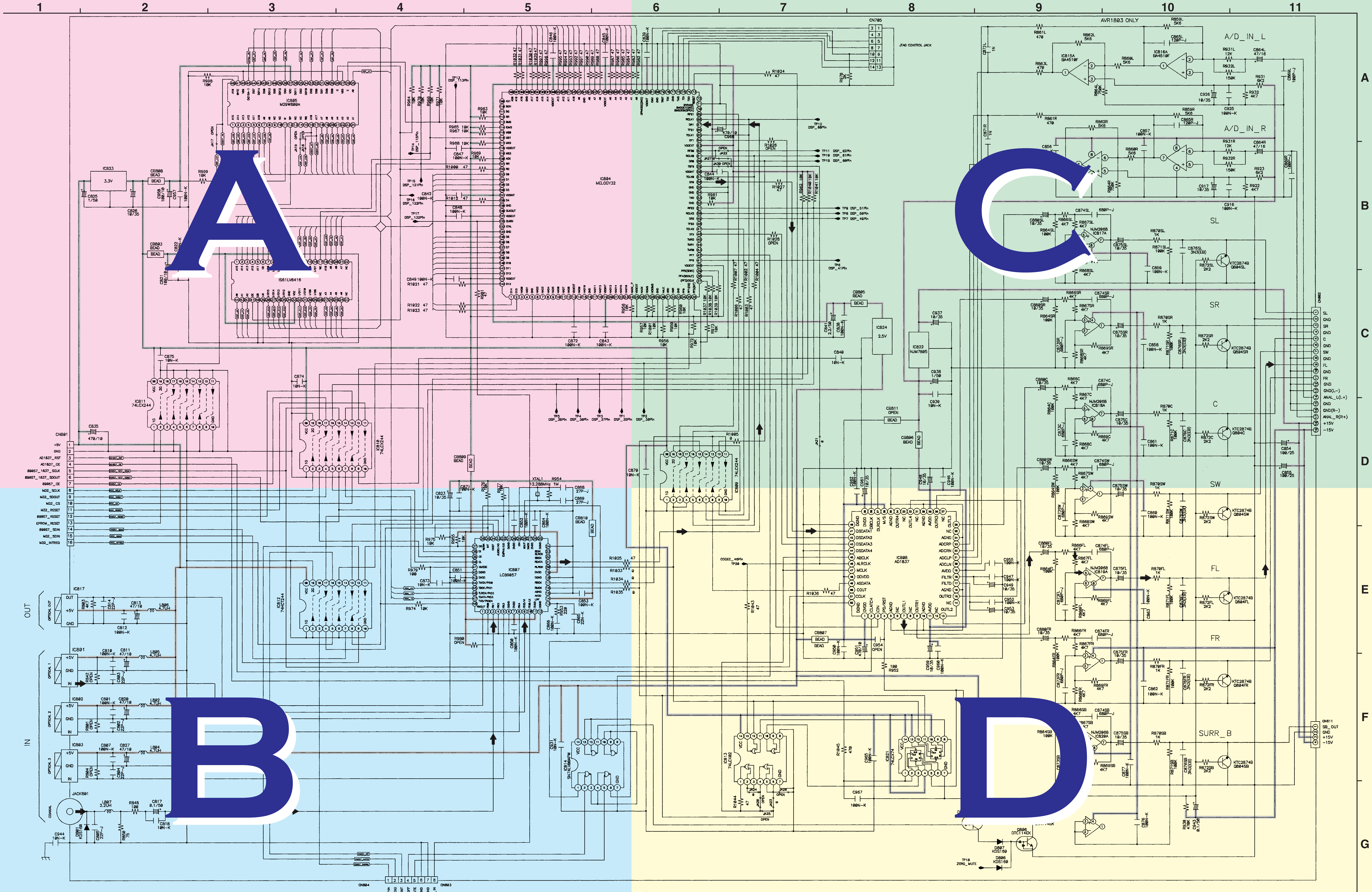
WARNING:
Parts marked with this symbol ⚠ have critical characteristics.
Use ONLY replacement parts recommended by the manufacture.

CAUTION:
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± B LINE
➜ SIGNAL LINE

SCHEMATIC DIAGRAMS (2/8)
DSP UNIT

SCHEMATIC DIAGRAMS (2/8)



NOTICE:
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
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EACH VOLTAGE AND CURRENT ARE MEASUERD AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

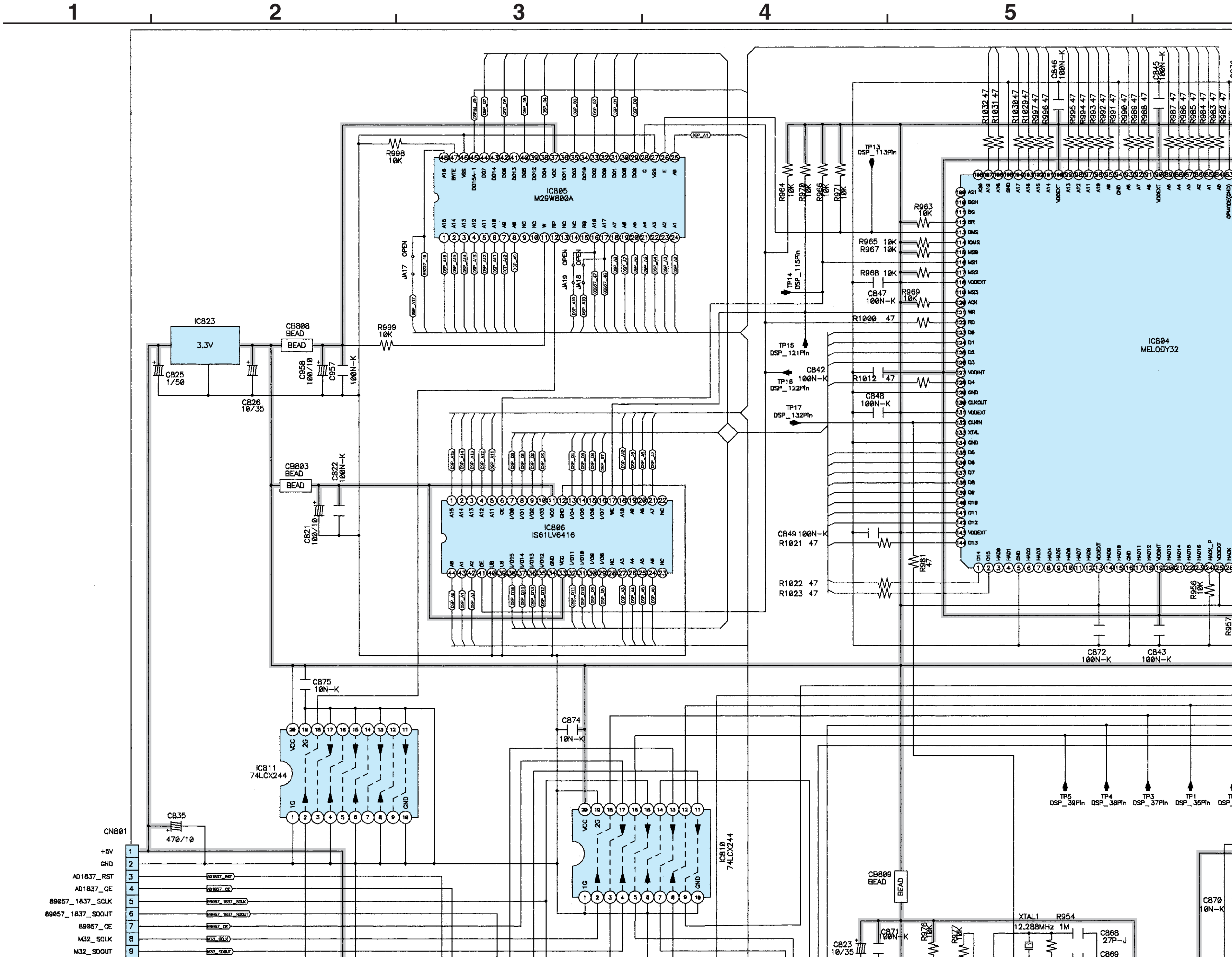
WARNING:
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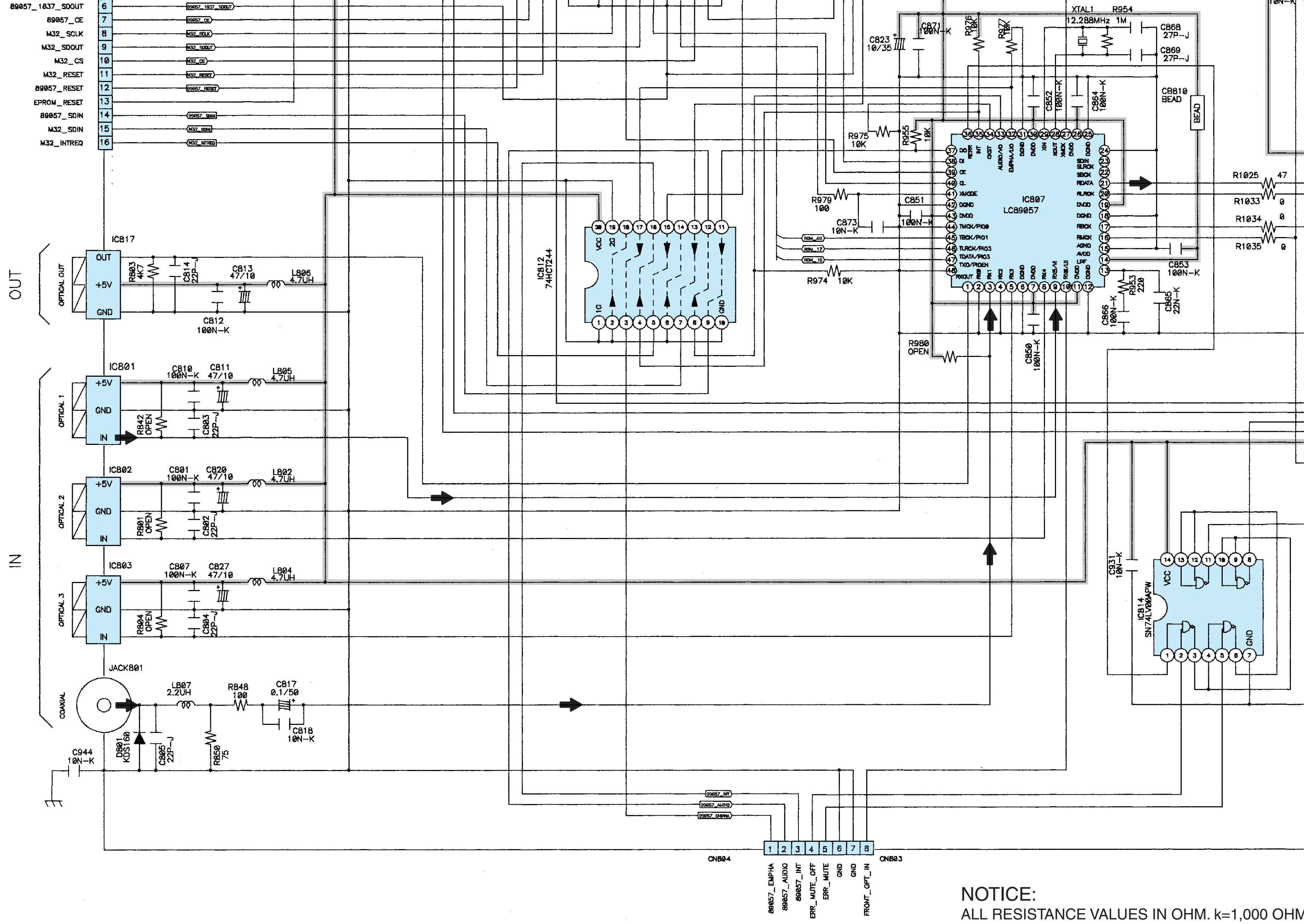
WARNING:
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CAUTION:
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± B LINE
➡ SIGNAL LINE

SCHEMATIC DIAGRAMS (2/8)
DSP UNIT


1
2
3
4
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IC805
M29W800A
IC806
IS61LV6416
IC804
MELODY32
IC823
3.3V
IC811
74LCX244
IC810
74LCX244
CB808
BEAD
CB803
BEAD
CB809
BEAD
C825
1/50
C826
10/35
C958
100/10
C957
100N-K
C822
100N-K
C821
100/10
C875
10N-K
C874
10N-K
C835
470/10
R998
10K
R999
10K
CN801
+5V
GND
AD1837_RST
AD1837_CE
89057_1837_SCLK
89057_1837_SDOUT
89057_CE
M32_SCLK
M32_SDOUT
XTAL1
12.288MHz
R954
1M
C868
27P-J
C872
100N-K
C843
100N-K
C870
10N-K
TP5
DSP_39Pin
TP4
DSP_38Pin
TP3
DSP_37Pin
TP1
DSP_35Pin



NOTICE:

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM

ALL CAPACITANCE VALUES IN MICRO FARAD. P=

EACH VOLTAGE AND CURRENT ARE MEASUERD

CONDITION.

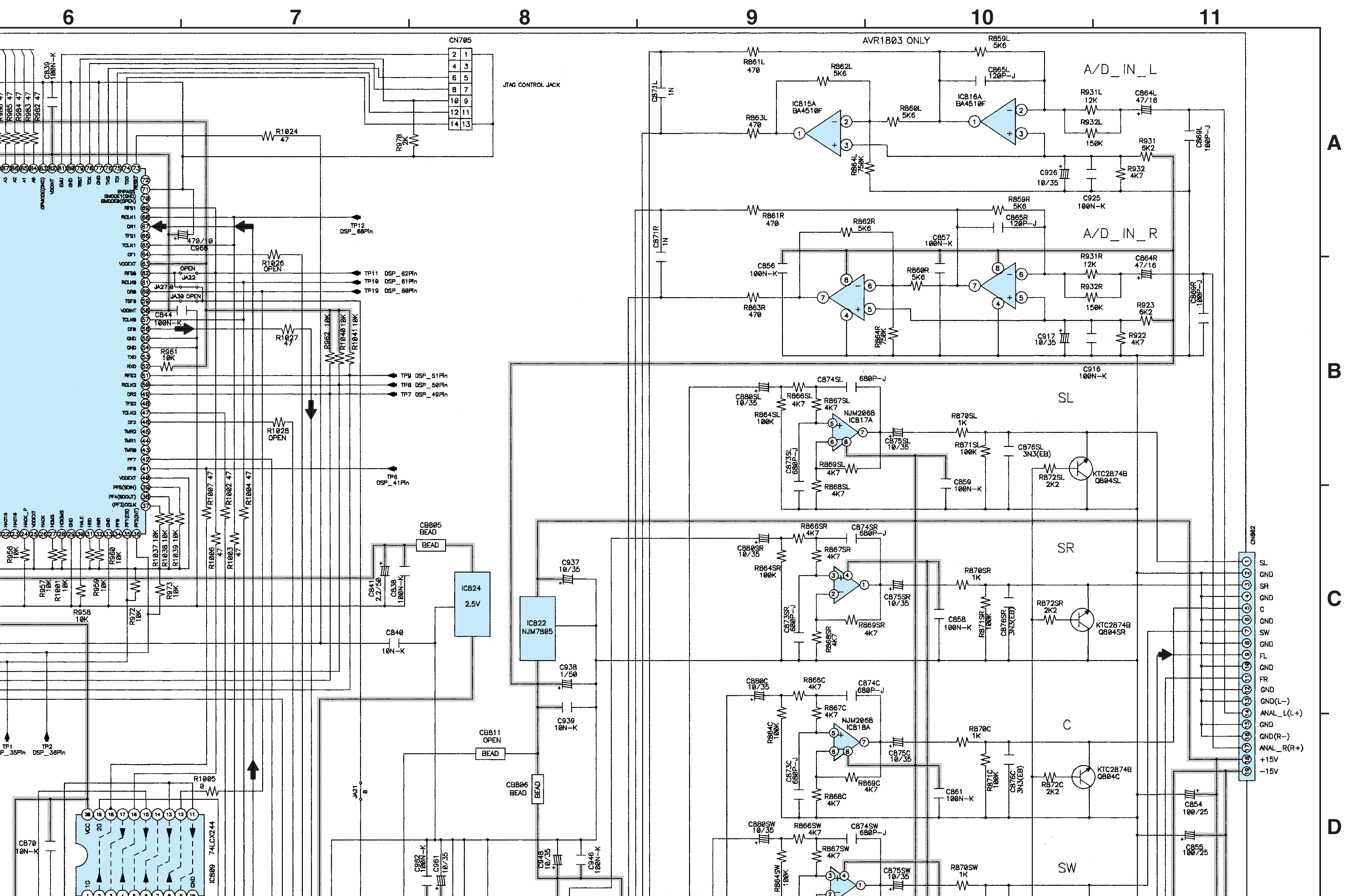
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE

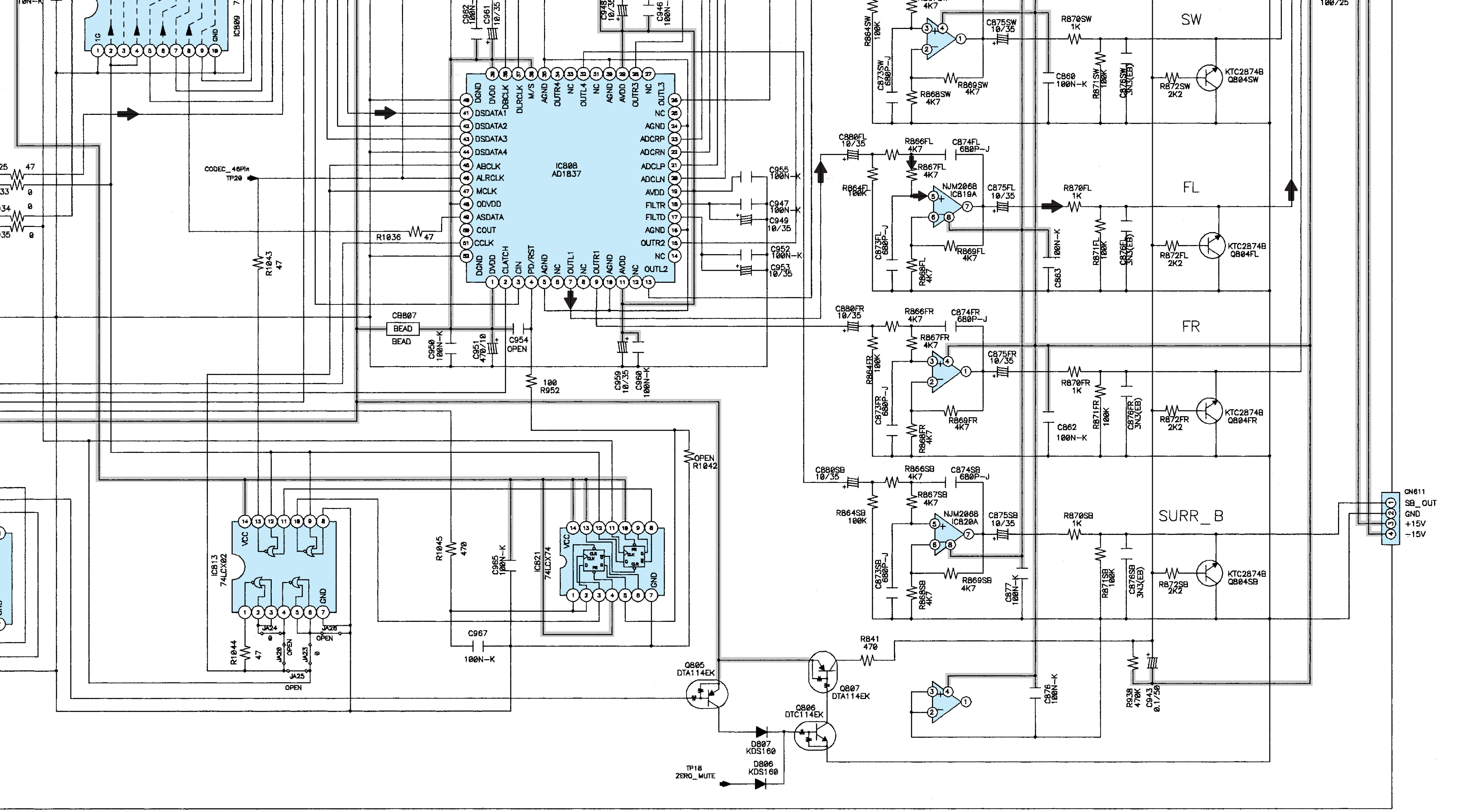
NOTICE.

WARNING:

DO NOT return the unit to the customer until the pro

corrected.


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CN705
JTAG CONTROL JACK
AVR1803 ONLY
A/D_IN_L
A/D_IN_R
IC815A
BA4510F
IC816A
BA4510F
R861L
470
R862L
5K6
R859L
5K6
C865L
120P-J
R860L
5K6
R863L
470
R931L
12K
C864L
47/16
R932L
150K
R931
6K2
R932
4K7
C926
10/35
C925
100N-K
C869L
100P-J
R861R
470
R862R
5K6
R859R
5K6
C865R
120P-J
C857
100N-K
C856
100N-K
R860R
5K6
R863R
470
R931R
12K
C864R
47/16
R932R
150K
R923
6K2
R922
4K7
C917
10/35
C916
100N-K
C869R
100P-J
SL
SR
C
SW
NJM2068
IC817A
IC818A
KTC2874B
Q804SL
Q804SR
Q804C
IC822
NJM7805
IC824
2.5V
CB805
BEAD
CB806
BEAD
CB811
OPEN
C937
10/35
C938
1/50
C939
10N-K
C840
10N-K
C841
2.2/50
C838
100N-K
C854
100/25
C855
100/25
CN802
SL
GND
SR
GND
C
GND
SW
GND
FL
GND
FR
GND
GND(L-)
ANAL_L(L+)
GND
GND(R-)
ANAL_R(R+)
+15V
-15V
TP12
DSP_68Pin
TP11 DSP_62Pin
TP10 DSP_61Pin
TP19 DSP_60Pin
TP9 DSP_51Pin
TP8 DSP_50Pin
TP7 DSP_49Pin
TP6
DSP_41Pin
TP1
DSP_35Pin
TP2
DSP_38Pin
R1024
47
R1026
OPEN
R1027
47
R1028
OPEN
R961
10K
C844
100N-K
C966
470/10
C839
100N-K
R978
2K
R1005
0
JA21
0
IC809
74LCX244
C870
10N-K
C962
100N-K
C961
10/35
C948
10/35
C946
100N-K



00 OHM M=1,000,000 OHM
ARAD. P=MICRO-MICRO FARAD
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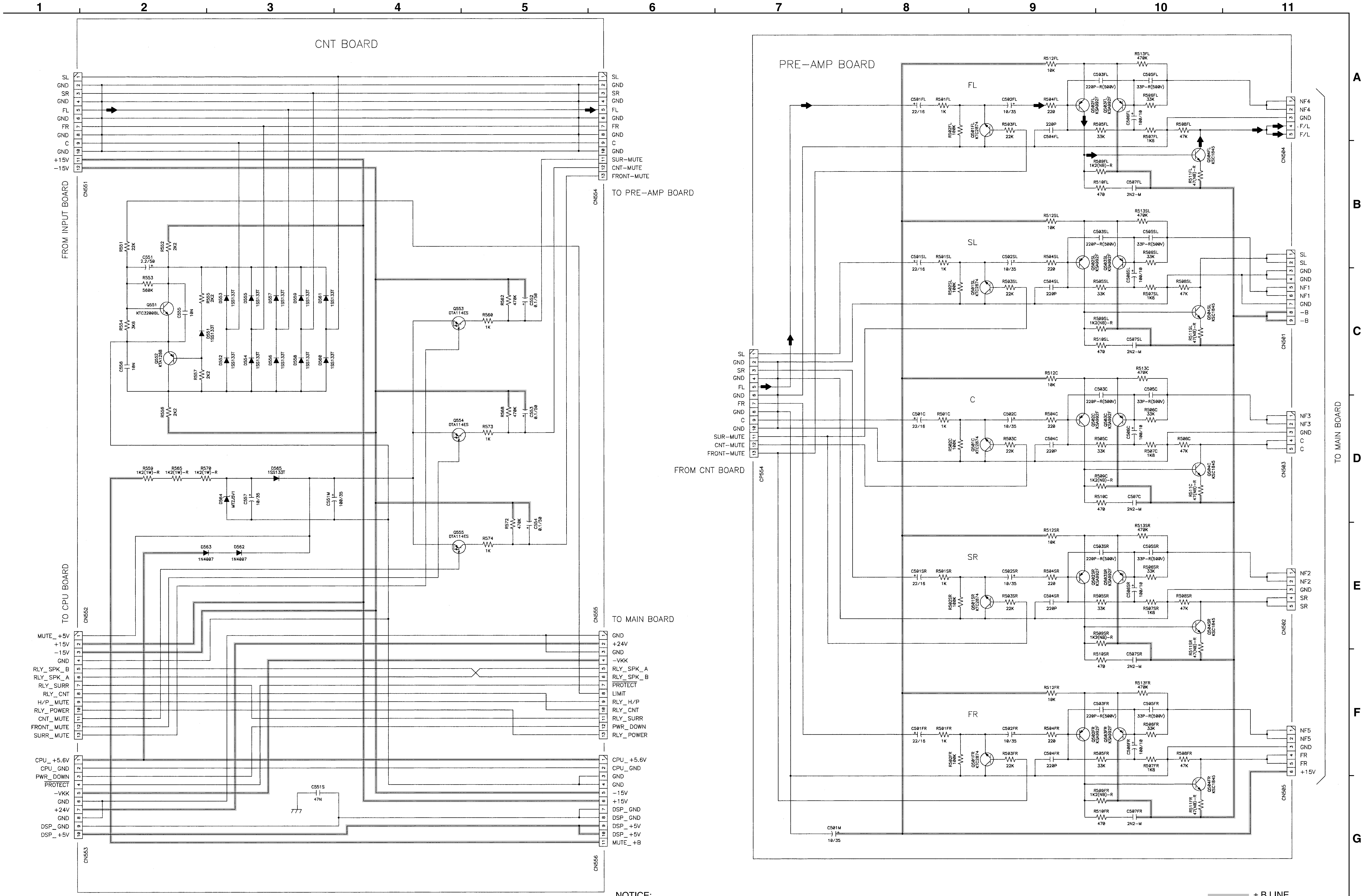
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Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

± B LINE
➡ SIGNAL LINE

SCHEMATIC DIAGRAMS (2/8)
DSP UNIT

SCHEMATIC DIAGRAMS (3/8)



NOTICE:
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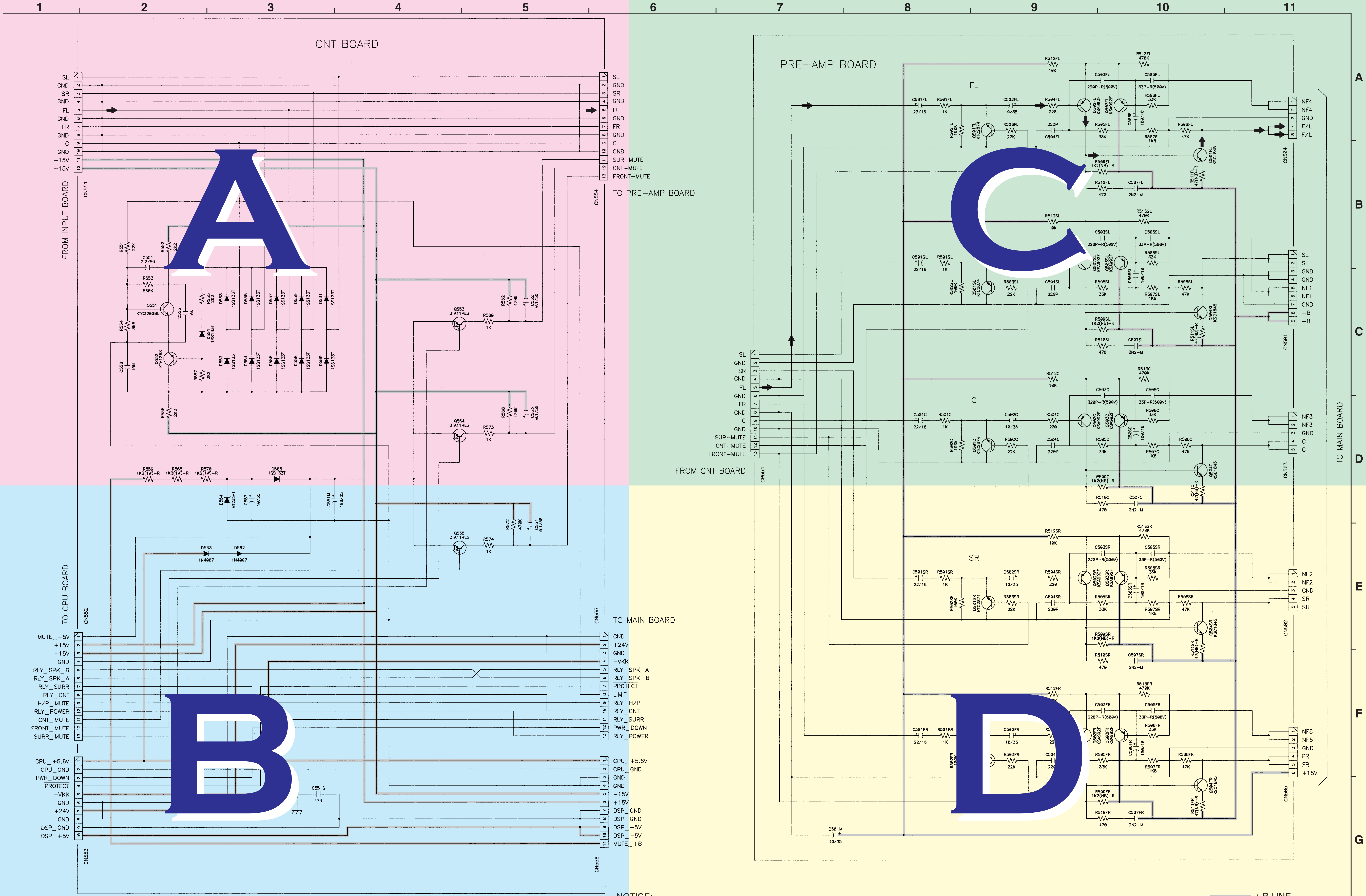
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WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (3/8)
CNT UNIT
PRE-AMP UNIT

SCHEMATIC DIAGRAMS (3/8)



± B LINE
SIGNAL LINE

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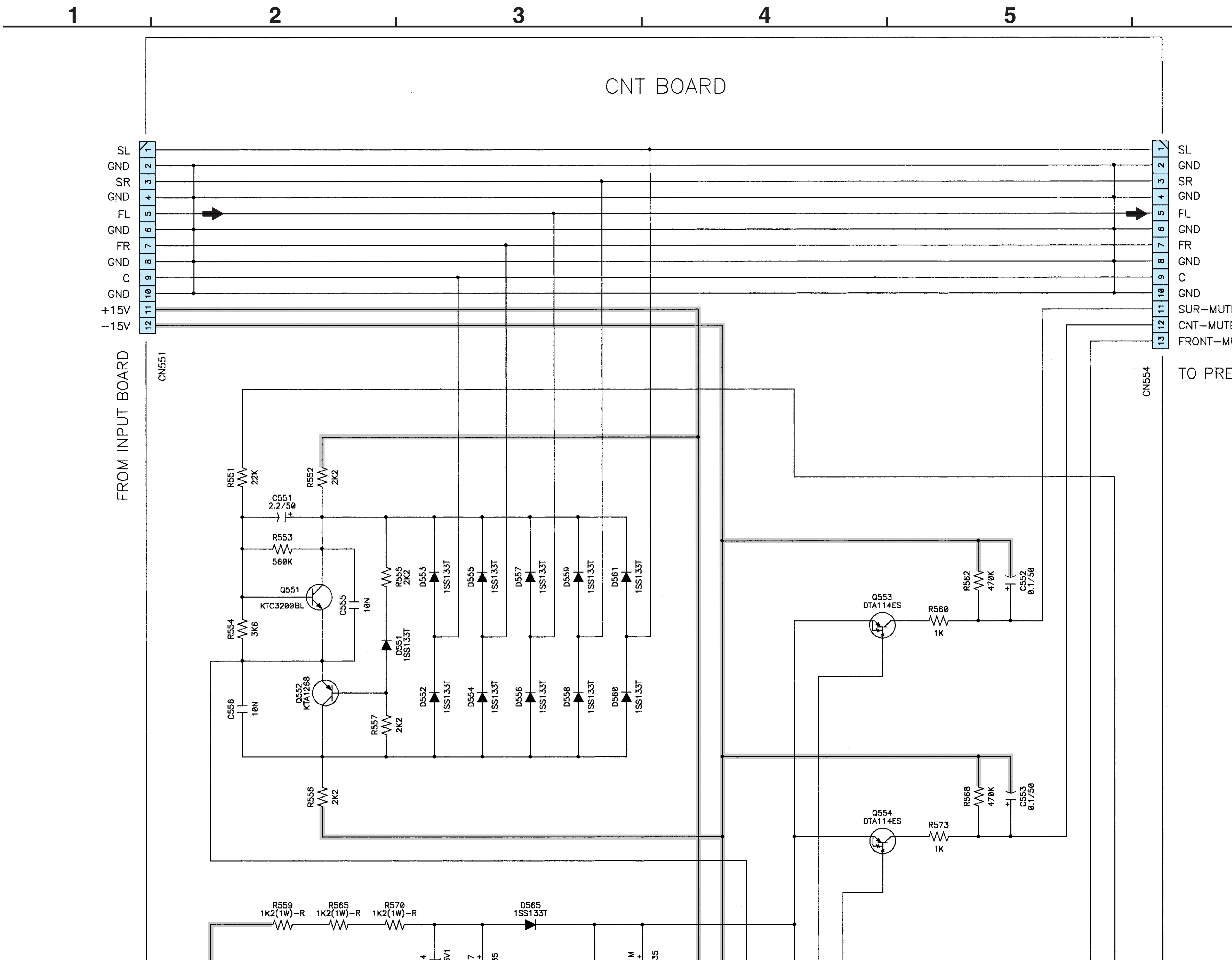
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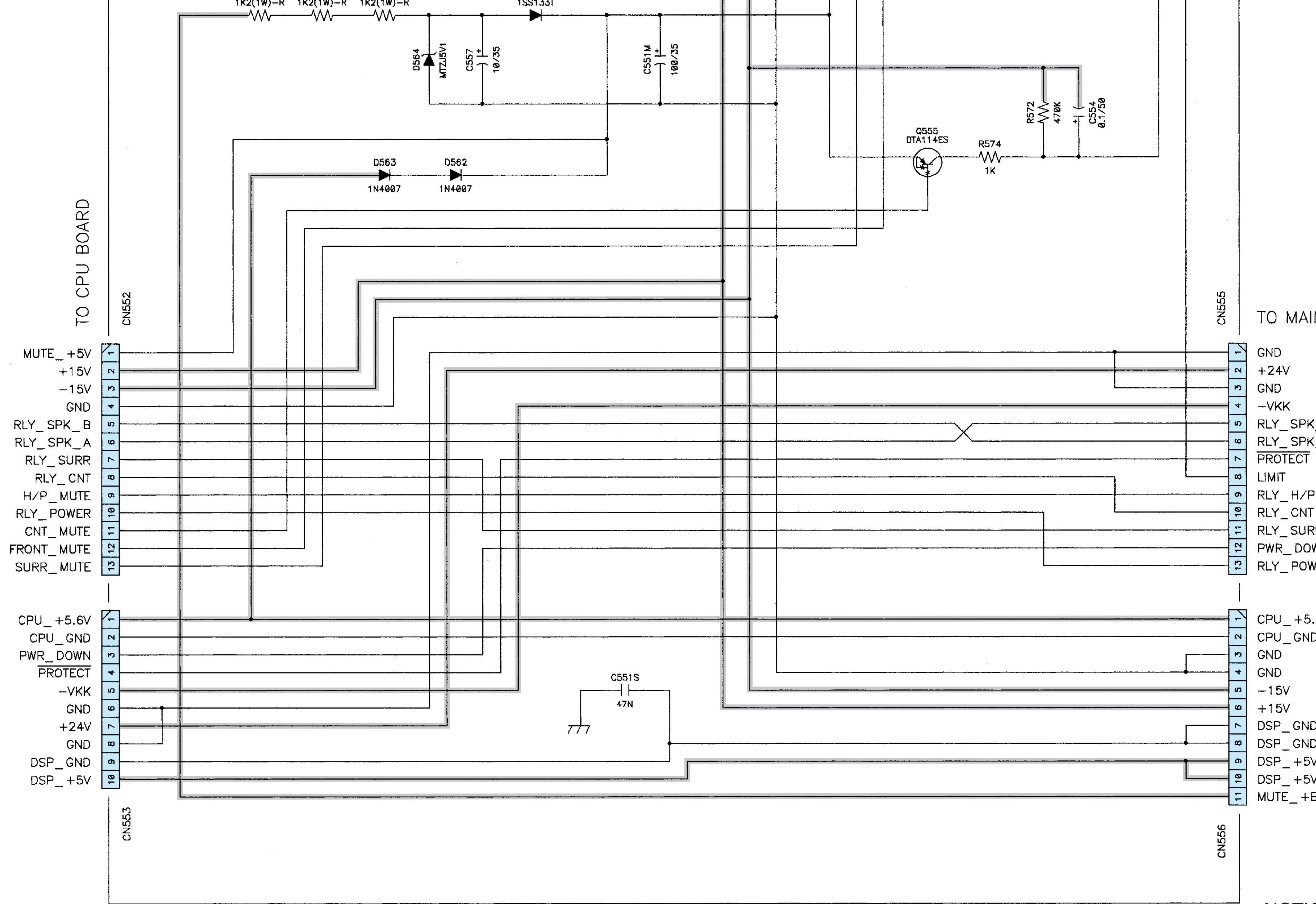
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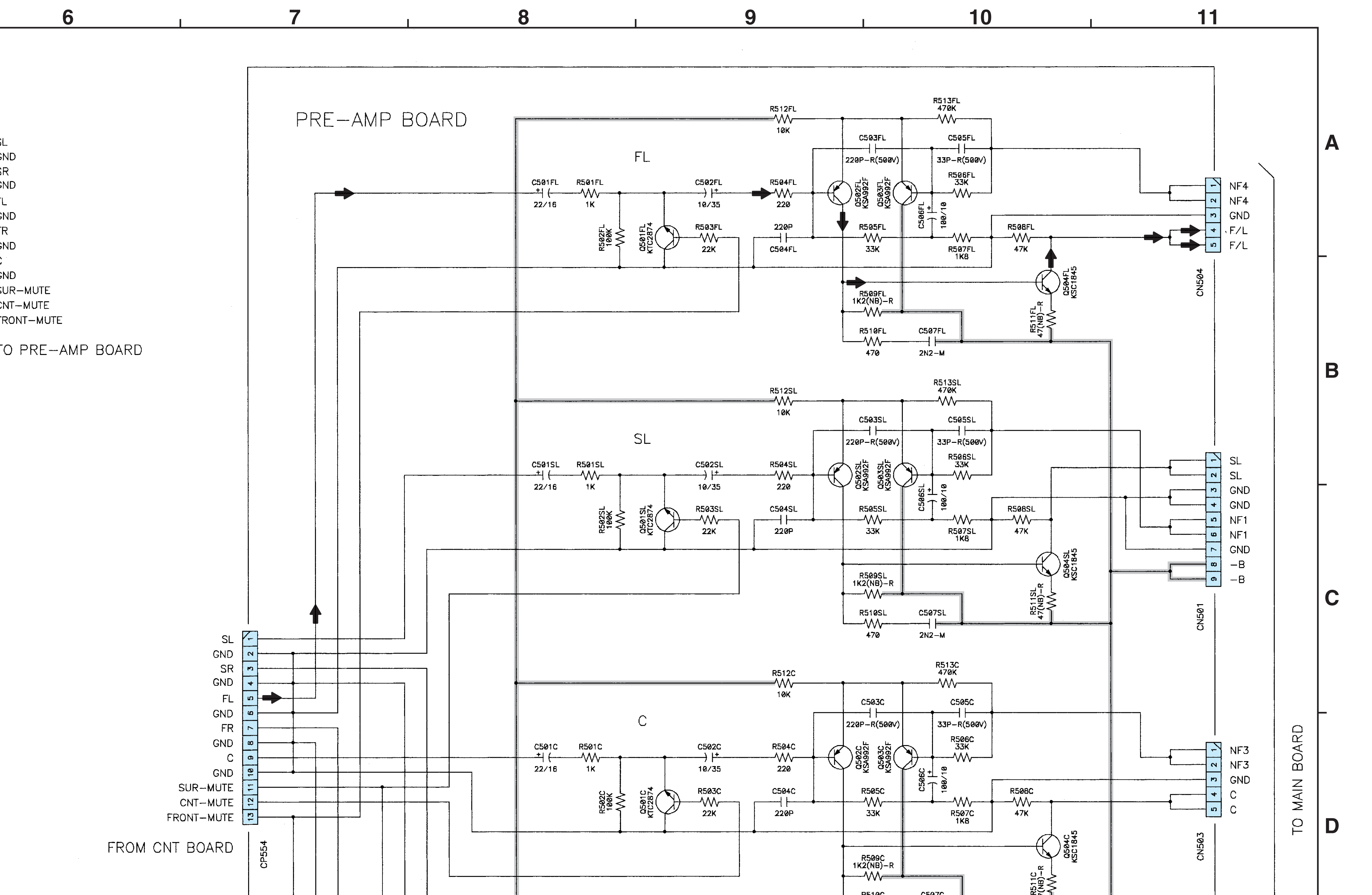
SCHEMATIC DIAGRAMS (3/8)
CNT UNIT
PRE-AMP UNIT

SCHEMATIC DIAGRAMS (3/8)

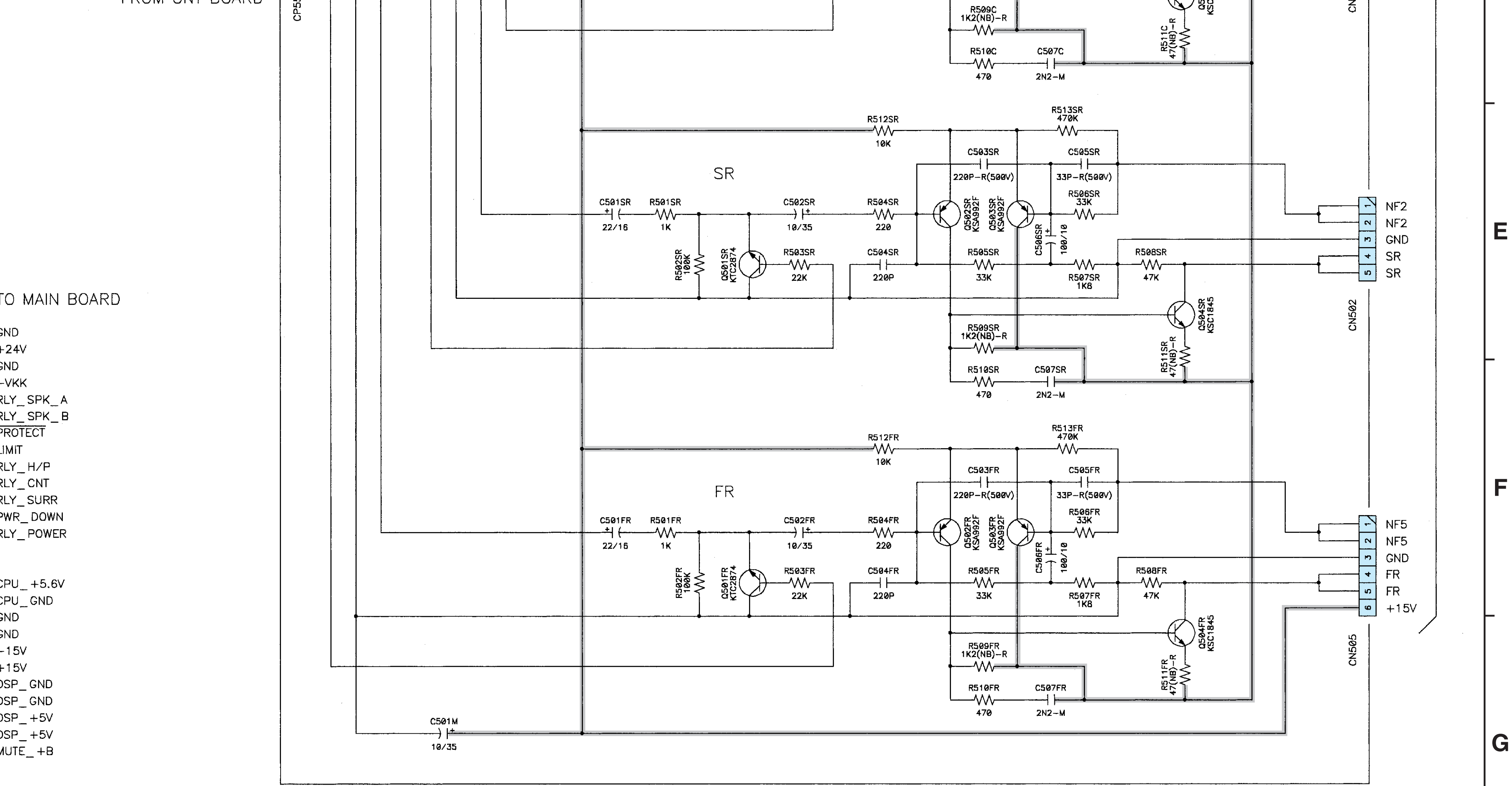




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PRE-AMP BOARD
FL
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TO PRE-AMP BOARD
FROM CNT BOARD
TO MAIN BOARD
SUR-MUTE
CNT-MUTE
FRONT-MUTE
CP554
CN504
CN501
CN503
NF4
NF4
GND
F/L
F/L
SL
SL
GND
GND
NF1
NF1
GND
-B
-B
NF3
NF3
GND
C
C



H

± B LINE
SIGNAL LINE

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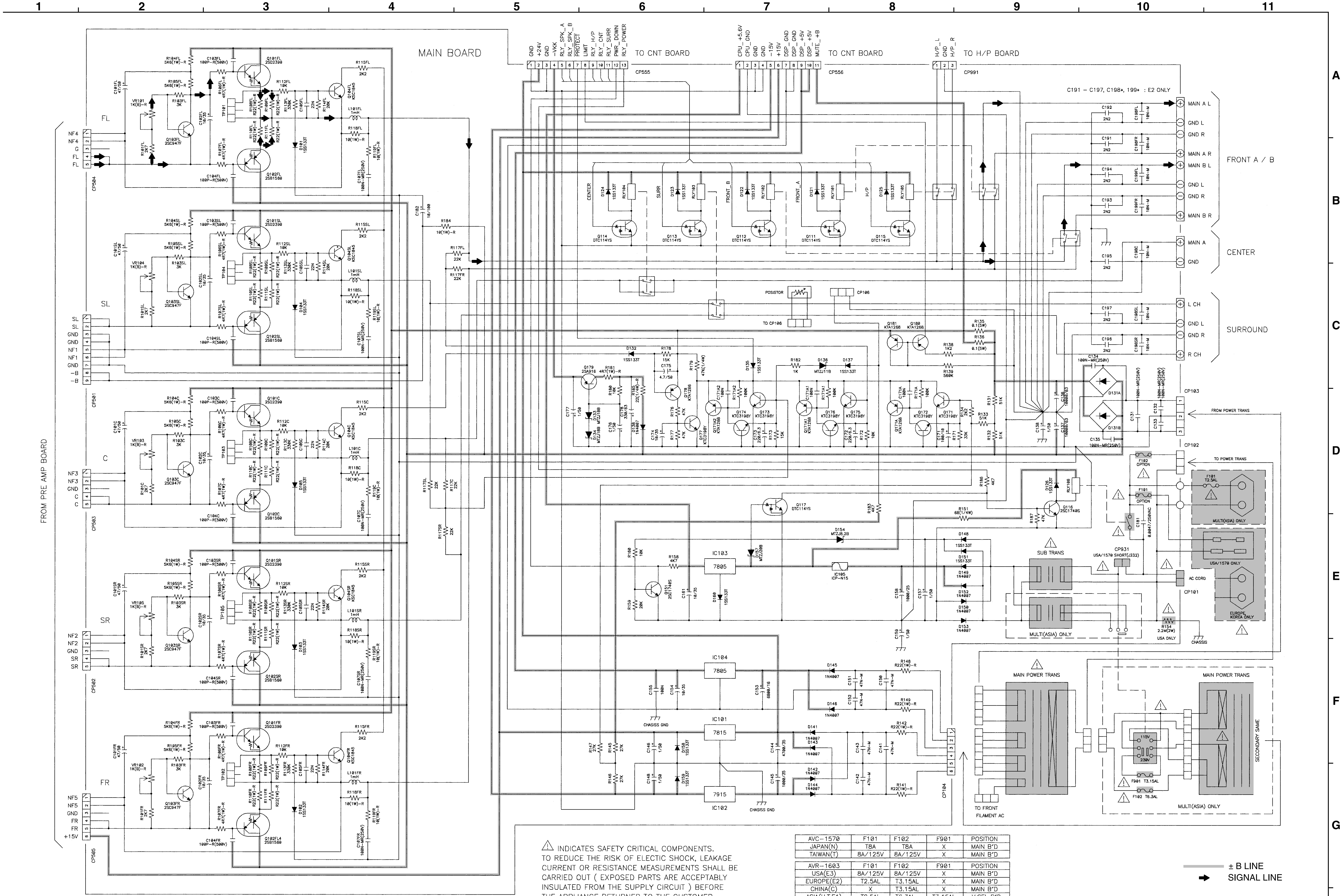
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WARNING:
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SCHEMATIC DIAGRAMS (3/8)
CNT UNIT
PRE-AMP UNIT

SCHEMATIC DIAGRAMS (4/8)



⚠ INDICATES SAFETY CRITICAL COMPONENTS.
TO REDUCE THE RISK OF ELECTIC SHOCK, LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS SHALL BE CARRIED OUT (EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT) BEFORE THE APPLIANCE RETURNED TO THE CUSTOMER.

AVC–1570	F101	F102	F901	POSITION
JAPAN(N)	T8A	T8A	X	MAIN B'D
TAIWAN(T)	8A/125V	8A/125V	X	MAIN B'D

AVR–1603	F101	F102	F901	POSITION
USA(E3)	8A/125V	8A/125V	X	MAIN B'D
EUROPE(E2)	T2.5AL	T3.15AL	X	MAIN B'D
CHINA(C)	X	T3.15AL	X	MAIN B'D
ASIA(H,T,E1)	T2.5AL	T6.3AL	T3.15AL	V.SEL B'D
KOREA(K)	T2.5AL	T3.15AL	X	MAIN B'D

NOTICE:
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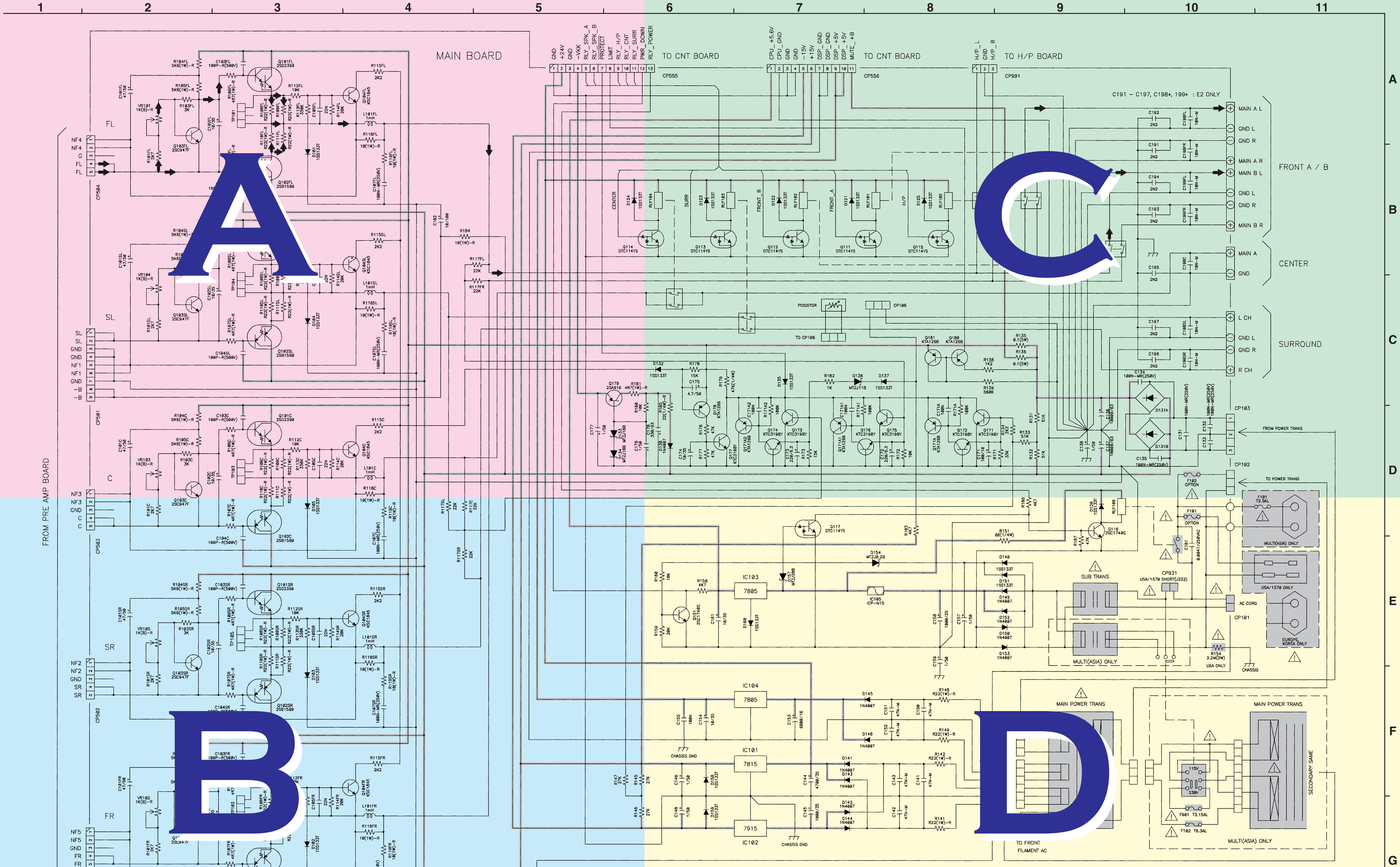
WARNING:
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WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (4/8)
MAIN UNIT
OUTLET UNIT
VOLTAGE SEL UNIT

SCHEMATIC DIAGRAMS (4/8)



⚠ INDICATES SAFETY CRITICAL COMPONENTS.
TO REDUCE THE RISK OF ELECTIC SHOCK, LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS SHALL BE CARRIED OUT (EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT) BEFORE THE APPLIANCE RETURNED TO THE CUSTOMER.

AVC–1570	F101	F102	F901	POSITION
JAPAN(N)	T8A	T8A	X	MAIN B'D
TAIWAN(T)	8A/125V	8A/125V	X	MAIN B'D

AVR–1603	F101	F102	F901	POSITION
USA(E3)	8A/125V	8A/125V	X	MAIN B'D
EUROPE(E2)	T2.5AL	T3.15AL	X	MAIN B'D
CHINA(C)	X	T3.15AL	X	MAIN B'D
ASIA(H,T,E1)	T2.5AL	T6.3AL	T3.15AL	V.SEL B'D
KOREA(K)	T2.5AL	T3.15AL	X	MAIN B'D

± B LINE
➡ SIGNAL LINE

NOTICE:
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASUERD AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

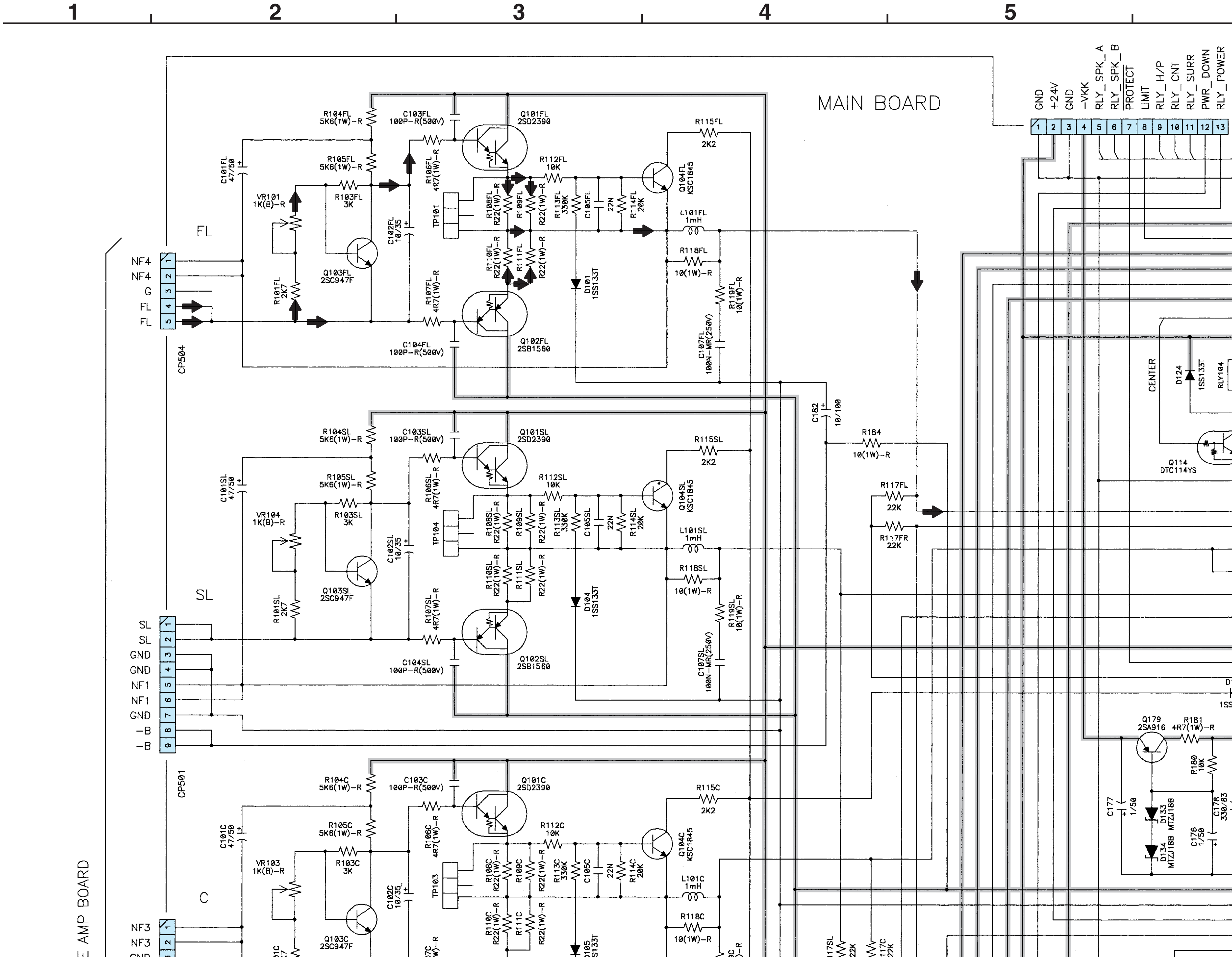
WARNING:
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Use ONLY replacement parts recommended by the manufacture.

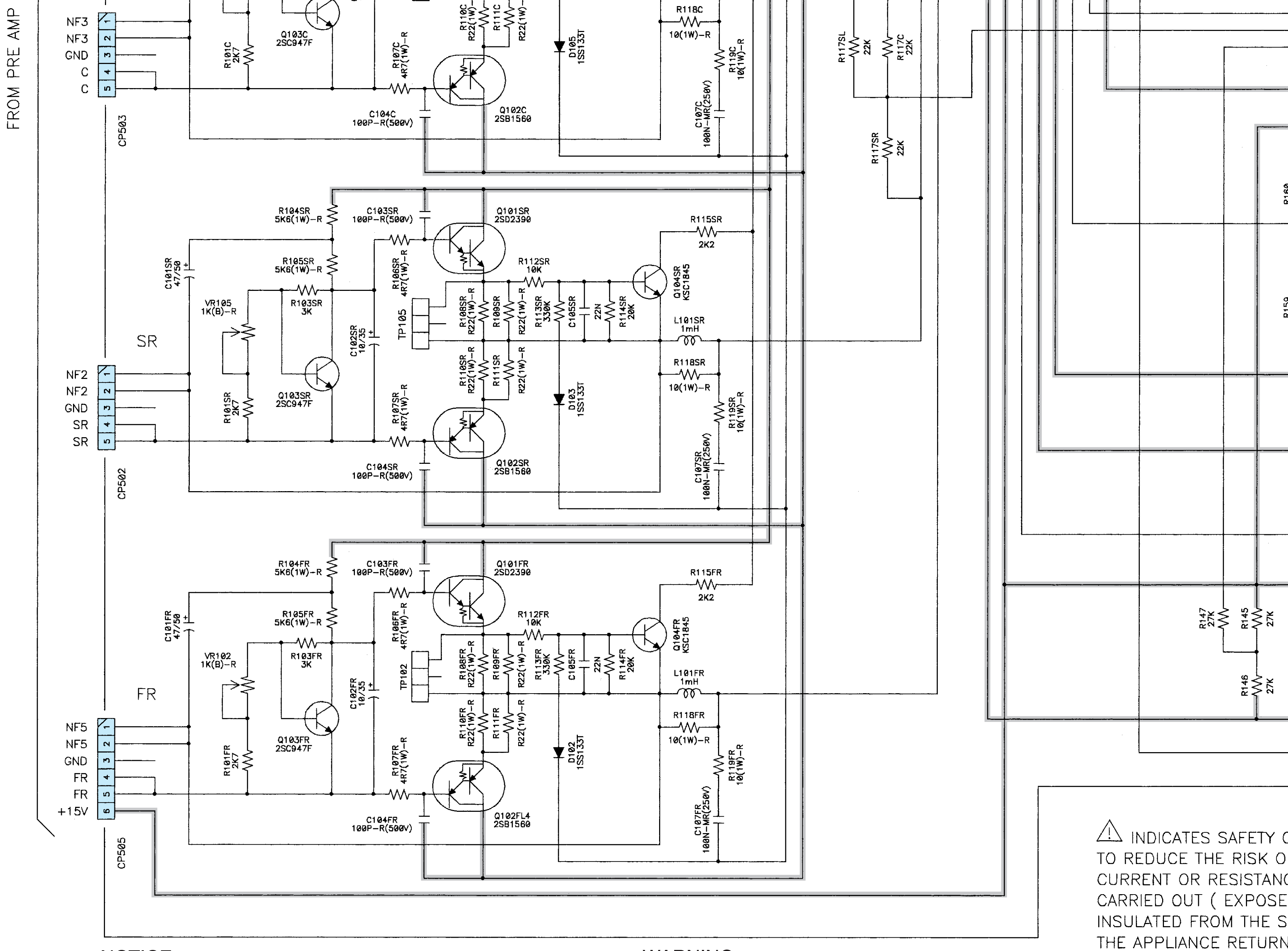
CAUTION:
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WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (4/8)
MAIN UNIT
OUTLET UNIT
VOLTAGE SEL UNIT

SCHEMATIC DIAGRAMS (4/8)





⚠ INDICATES SAFETY C
TO REDUCE THE RISK O
CURRENT OR RESISTANC
CARRIED OUT (EXPOSE
INSULATED FROM THE S
THE APPLIANCE RETURN

NOTICE:

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
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CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:

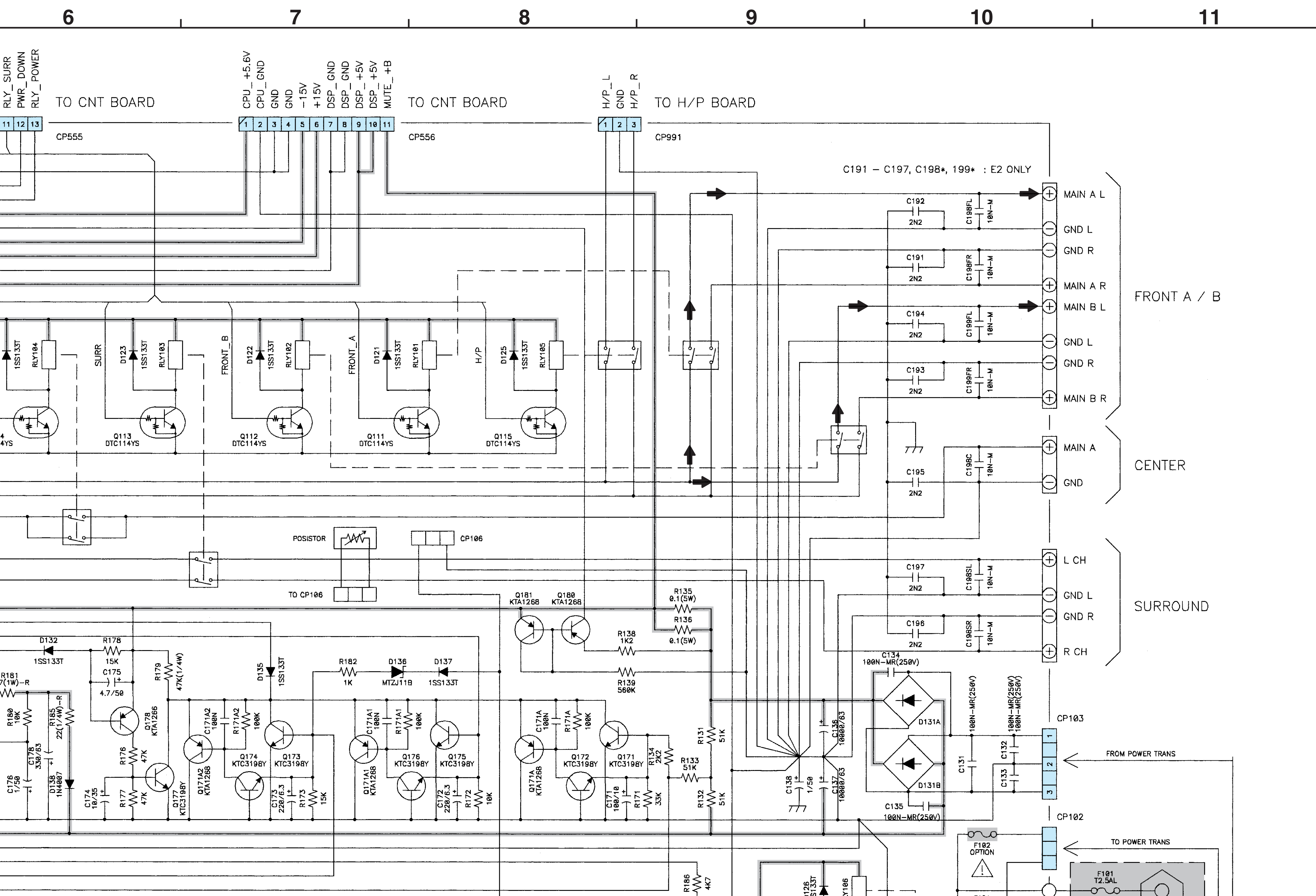
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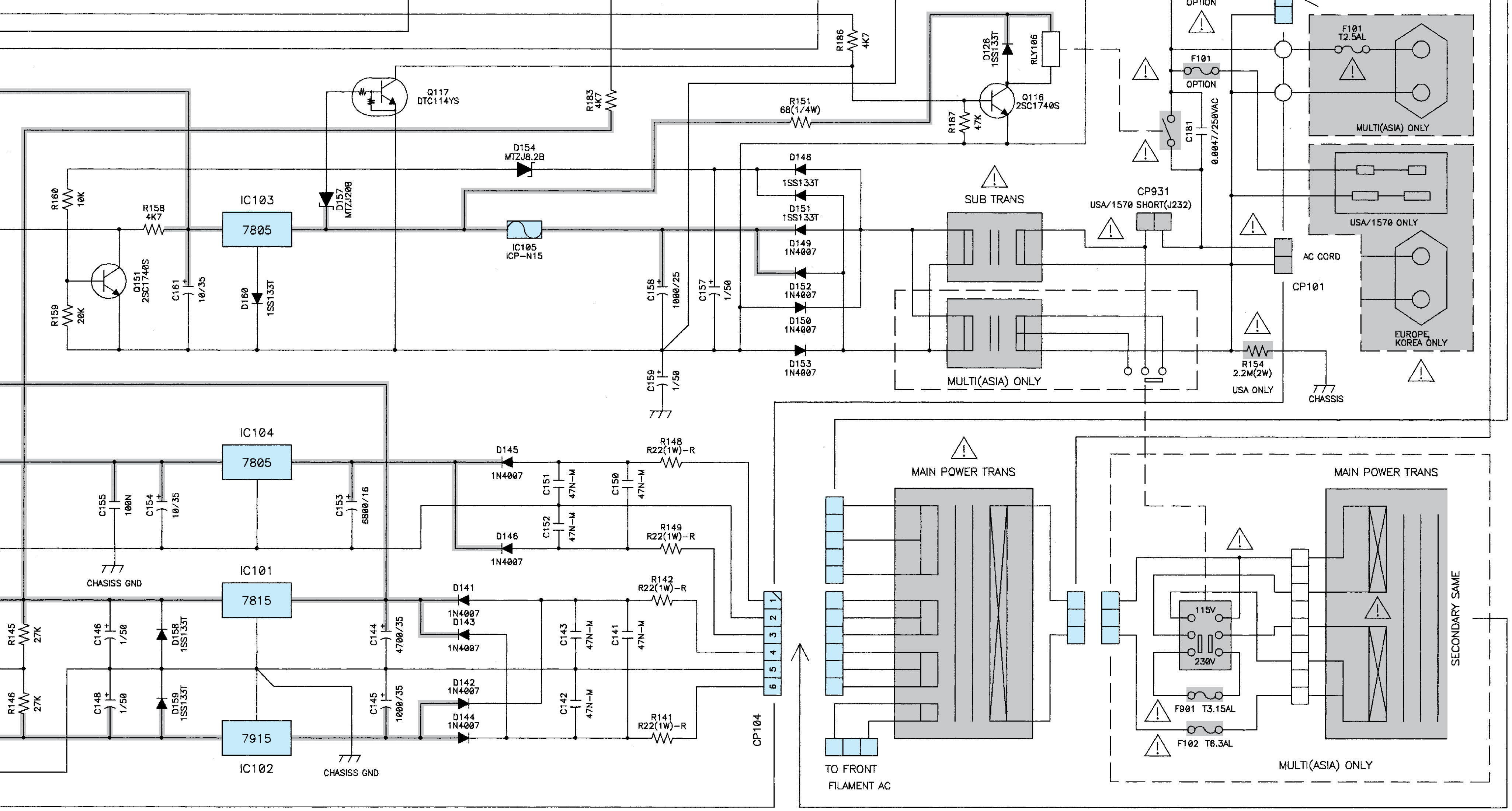
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WARNING:

DO NOT retur
corrected.


6
7
8
9
10
11
A
B
C
D
RLY_SURR
PWR_DOWN
RLY_POWER
TO CNT BOARD
CP555
CPU_+5.6V
CPU_GND
GND
GND
-15V
+15V
DSP_GND
DSP_GND
DSP_+5V
DSP_+5V
MUTE_+B
TO CNT BOARD
CP556
H/P_L
GND
H/P_R
TO H/P BOARD
CP991
C191 – C197, C198*, 199* : E2 ONLY
MAIN A L
GND L
GND R
MAIN A R
MAIN B L
GND L
GND R
MAIN B R
FRONT A / B
MAIN A
GND
CENTER
L CH
GND L
GND R
R CH
SURROUND
C192 2N2
C191 2N2
C194 2N2
C193 2N2
C195 2N2
C197 2N2
C196 2N2
C198FL 10N-M
C198FR 10N-M
C199FL 10N-M
C199FR 10N-M
C198C 10N-M
C198SL 10N-M
C198SR 10N-M
RLY104
SURR
D123 1SS133T
RLY103
FRONT_B
D122 1SS133T
RLY102
FRONT_A
D121 1SS133T
RLY101
H/P
D125 1SS133T
RLY105
Q113 DTC114YS
Q112 DTC114YS
Q111 DTC114YS
Q115 DTC114YS
POSISTOR
CP106
TO CP106
Q181 KTA1268
Q180 KTA1268
R135 0.1(5W)
R136 0.1(5W)
R138 1K2
R139 560K
D132 1SS133T
R178 15K
C175 4.7/50
R179 47K(1/4W)
R180 10K
R185 22(1/4W)-R
C178 330/63
C176 1/50
D138 1N4007
Q178 KTA1266
R176 47K
R177 47K
C174 10/35
Q177 KTC3198Y
D135 1SS133T
R182 1K
D136 MTZJ11B
D137 1SS133T
C171A2 100N
R171A2 100K
Q171A2 KTA1268
Q174 KTC3198Y
Q173 KTC3198Y
C173 220/6.3
R173 15K
C171A1 100N
R171A1 100K
Q171A1 KTA1268
Q176 KTC3198Y
Q175 KTC3198Y
C172 220/6.3
R172 10K
C171A 100N
R171A 100K
Q171A KTA1268
Q172 KTC3198Y
Q171 KTC3198Y
C171 100/10
R171 33K
R134 2K2
R133 51K
R131 51K
R132 51K
C138 1/50
C136 10000/63
C137 10000/63
C134 100N-MR(250V)
D131A
D131B
C135 100N-MR(250V)
C131 100N-MR(250V)
C132 100N-MR(250V)
C133 100N-MR(250V)
CP103
FROM POWER TRANS
CP102
F102 OPTION
TO POWER TRANS
F101 T2.5AL
R186 4K7



AVC−1570	F101	F102	F901	POSITION
JAPAN(N)	T8A	T8A	X	MAIN B'D
TAIWAN(T)	8A/125V	8A/125V	X	MAIN B'D

AVR−1603	F101	F102	F901	POSITION
USA(E3)	8A/125V	8A/125V	X	MAIN B'D
EUROPE(E2)	T2.5AL	T3.15AL	X	MAIN B'D
CHINA(C)	X	T3.15AL	X	MAIN B'D
ASIA(H,T,E1)	T2.5AL	T6.3AL	T3.15AL	V.SEL B'D
KOREA(K)	T2.5AL	T3.15AL	X	MAIN B'D

AFETY CRITICAL COMPONENTS.
RISK OF ELECTIC SHOCK, LEAKAGE
SISTANCE MEASUREMENTS SHALL BE
XPOSED PARTS ARE ACCEPTABLY
THE SUPPLY CIRCUIT) BEFORE
RETURNED TO THE CUSTOMER.

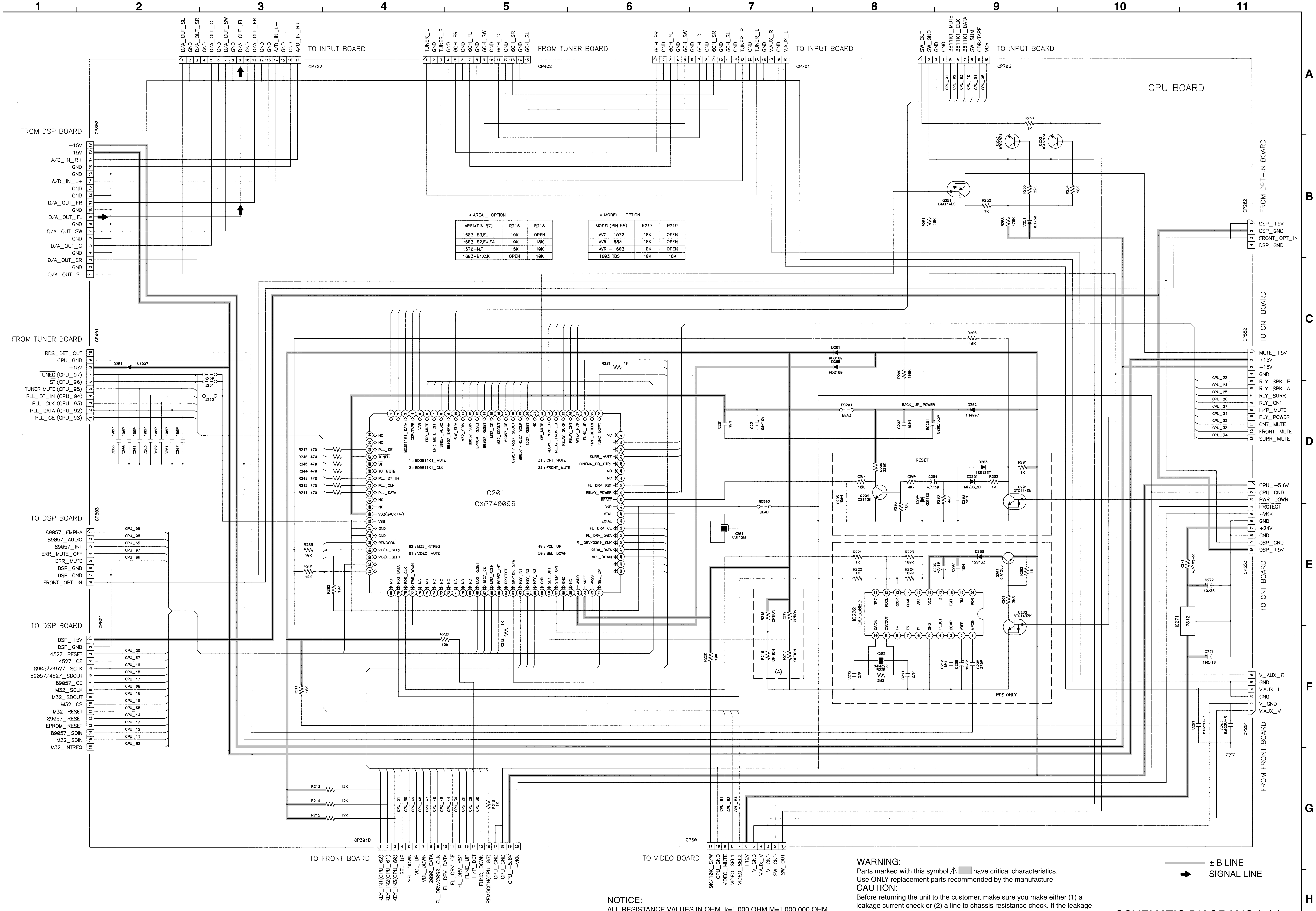
NING:
OT return the unit to the customer until the problem is located and
ted.

± B LINE
SIGNAL LINE

SCHEMATIC DIAGRAMS (4/8)
MAIN UNIT
OUTLET UNIT
VOLTAGE SEL UNIT

E
F
G
H

SCHEMATIC DIAGRAMS (5/8)



∗ AREA _ OPTION

AREA(PIN 57)	R216	R218
1603–E3,EU	10K	OPEN
1603–E2,EK,EA	10K	18K
1570–N,T	15K	10K
1603–E1,C,K	OPEN	10K

∗ MODEL _ OPTION

MODEL(PIN 58)	R217	R219
AVC – 1570	10K	OPEN
AVR – 683	10K	OPEN
AVR – 1603	10K	OPEN
1603 RDS	10K	18K

NOTICE:
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ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
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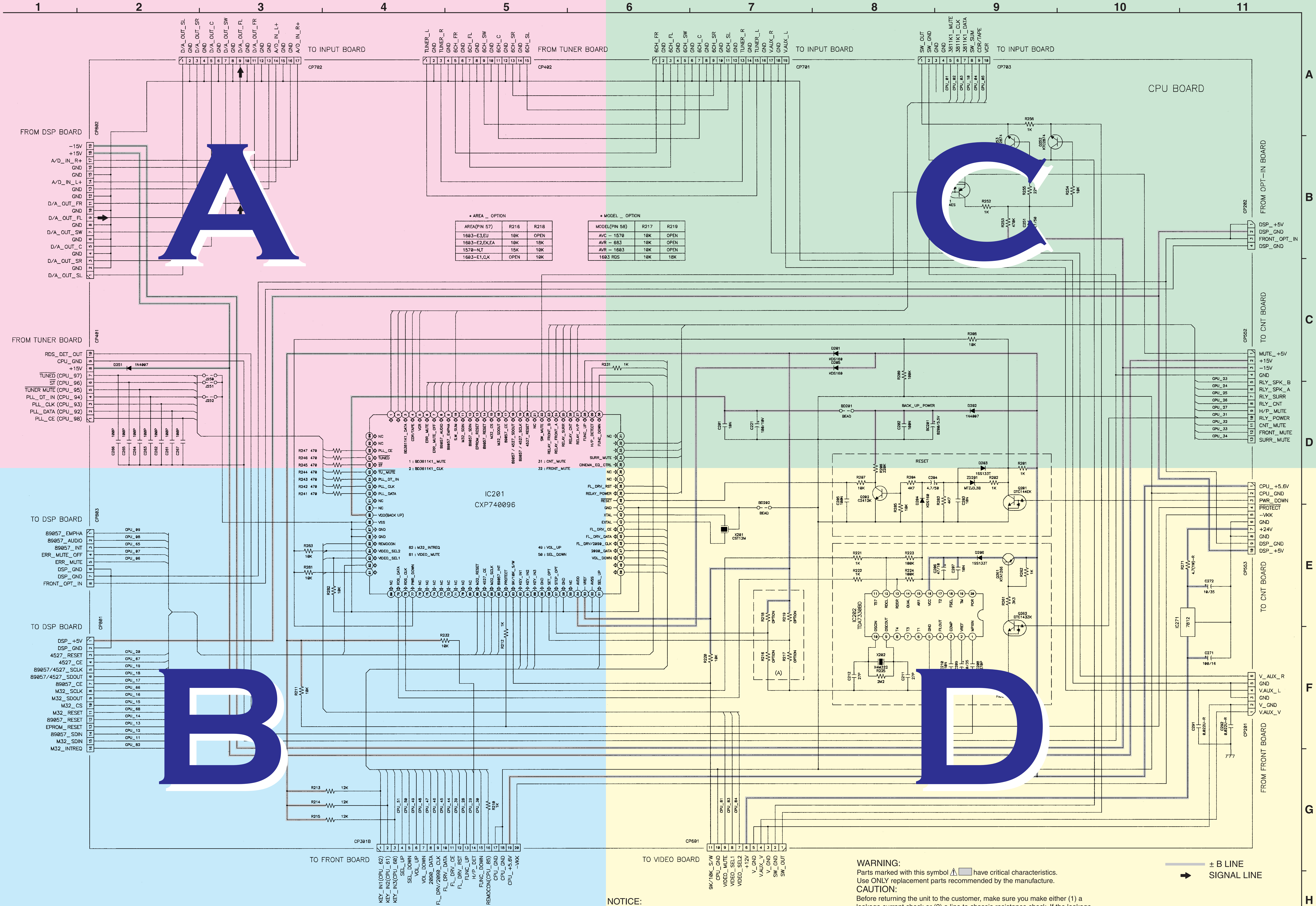
WARNING:
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CAUTION:
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WARNING:
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SCHEMATIC DIAGRAMS (5/8)
CPU UNIT

SCHEMATIC DIAGRAMS (5/8)



* AREA _ OPTION

AREA(PIN 57)	R216	R218
1603–E3,EU	10K	OPEN
1603–E2,EK,EA	10K	18K
1570–N,T	15K	10K
1603–E1,C,K	OPEN	10K

* MODEL _ OPTION

MODEL(PIN 58)	R217	R219
AVC – 1570	10K	OPEN
AVR – 683	10K	OPEN
AVR – 1603	10K	OPEN
1603 RDS	10K	18K

± B LINE
SIGNAL LINE

WARNING:
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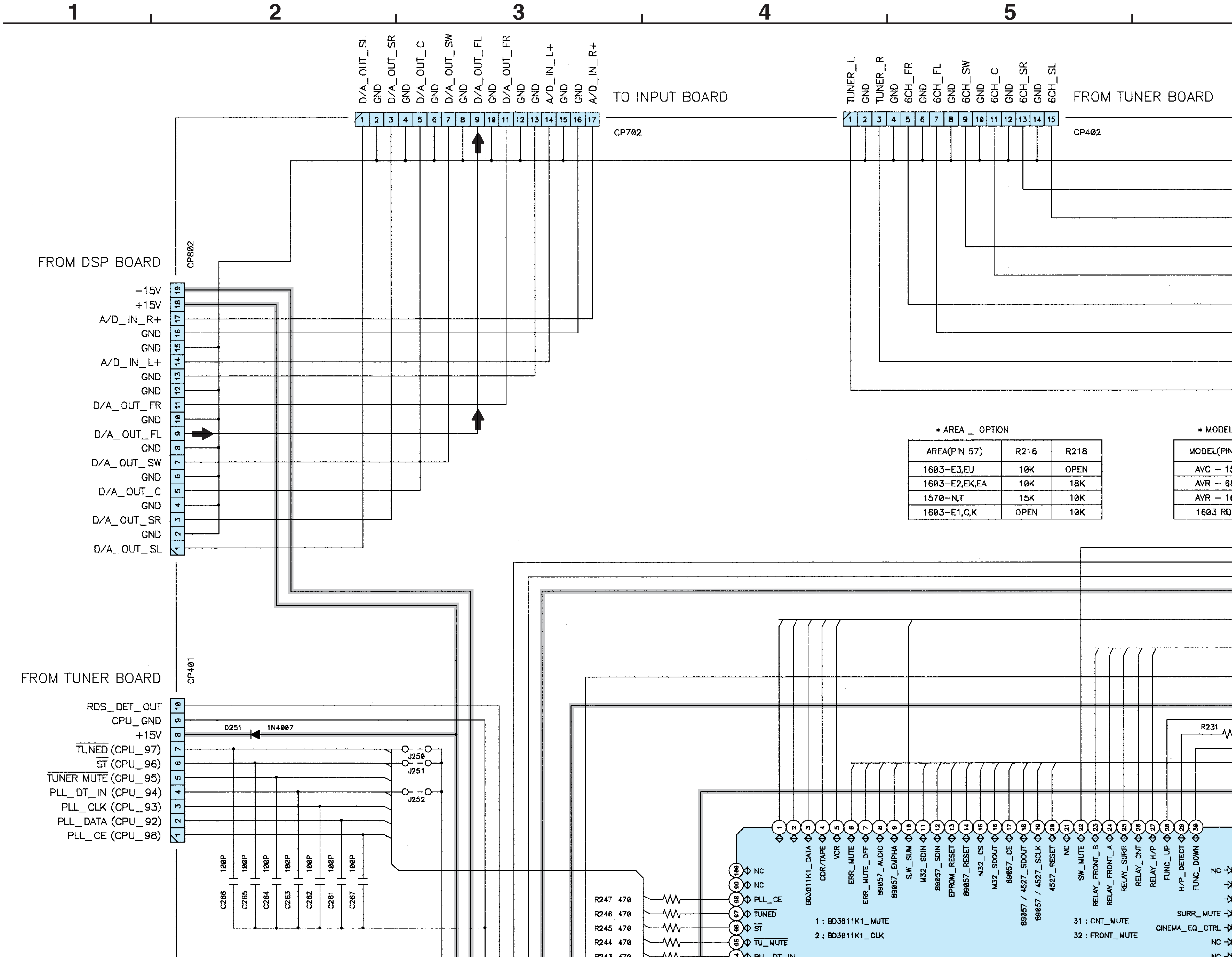
CAUTION:
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WARNING:
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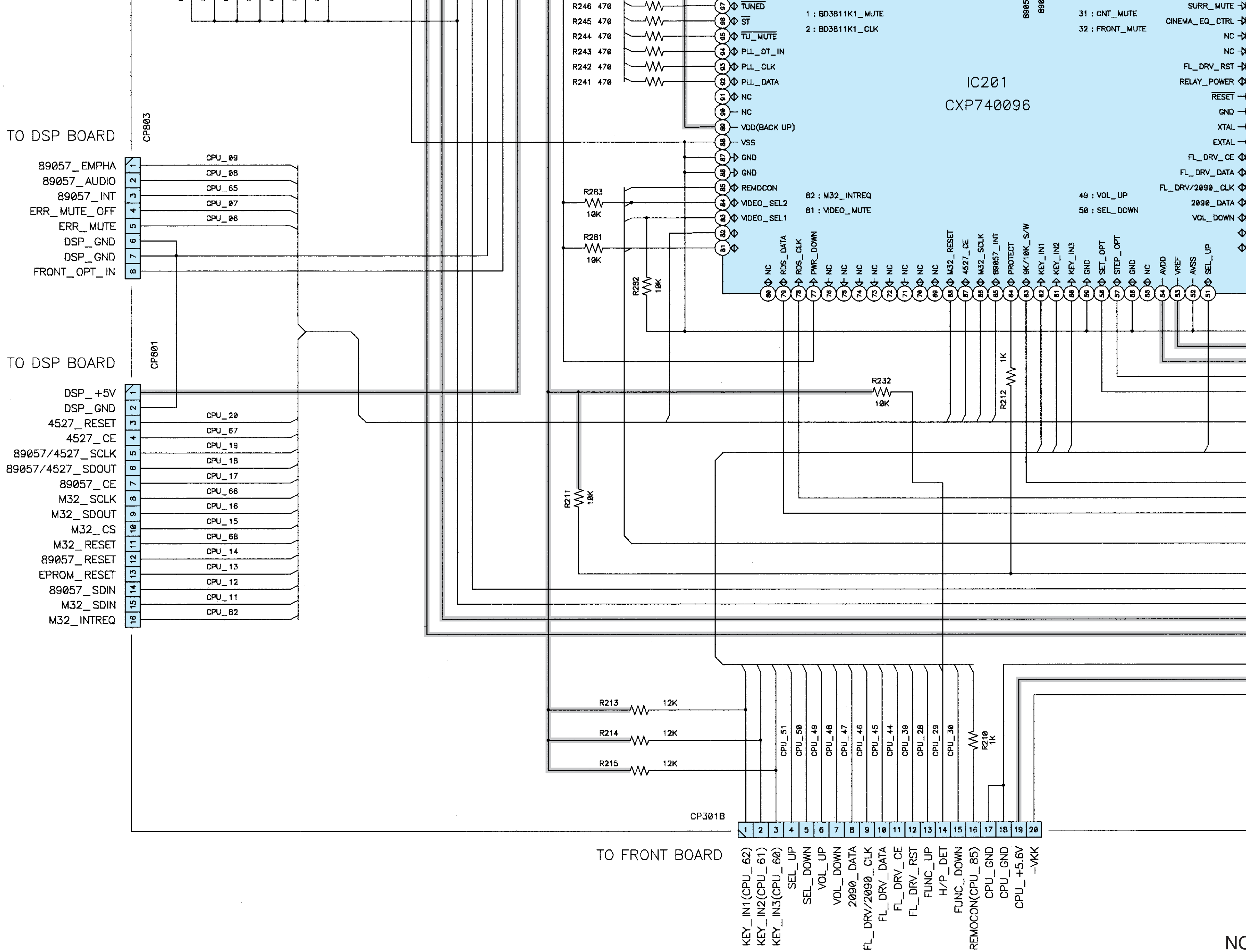
SCHEMATIC DIAGRAMS (5/8)
CPU UNIT

SCHEMATIC DIAGRAMS (5/8)

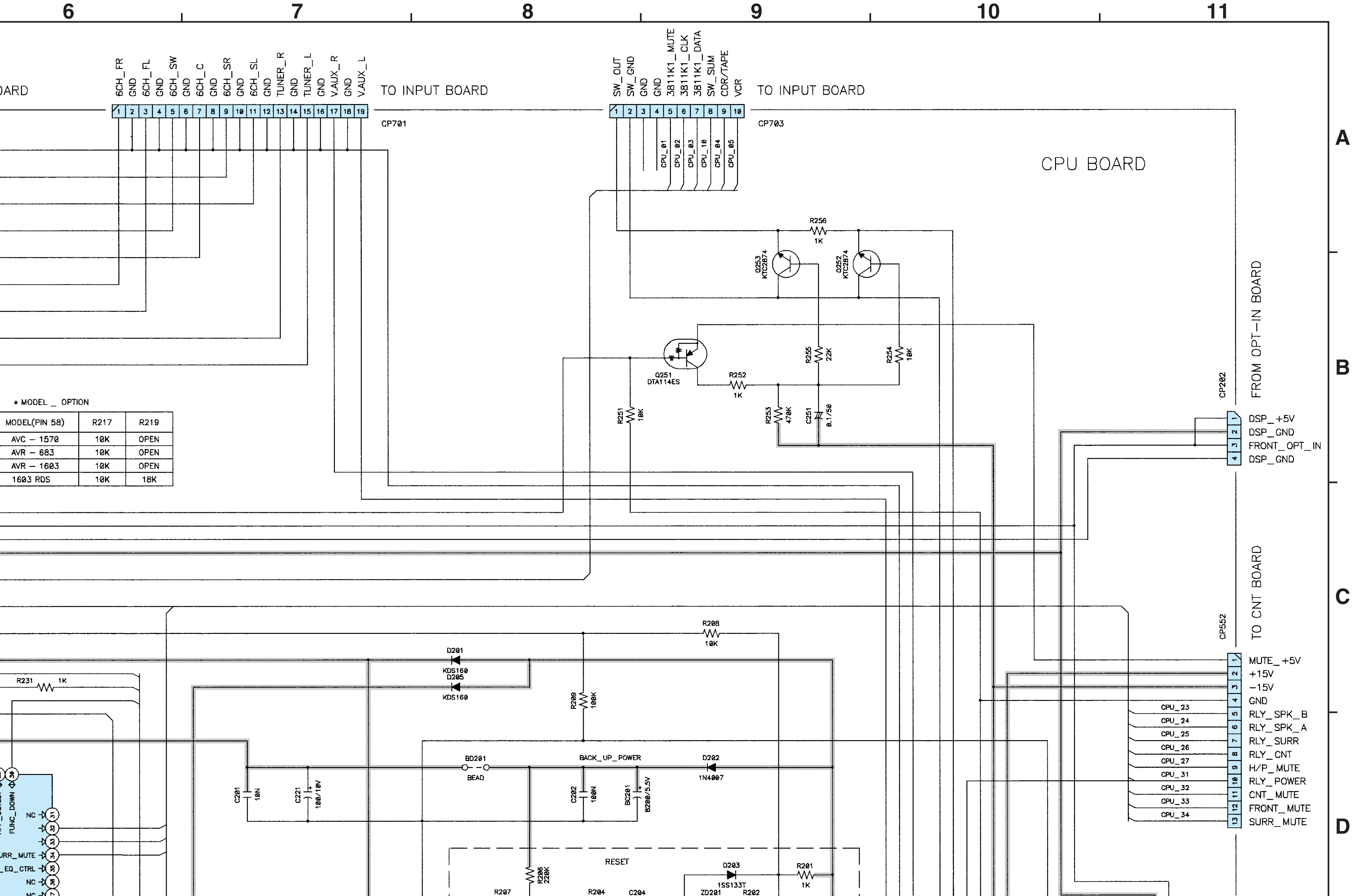


* AREA _ OPTION

AREA(PIN 57)	R216	R218
1603–E3,EU	10K	OPEN
1603–E2,EK,EA	10K	18K
1570–N,T	15K	10K
1603–E1,C,K	OPEN	10K

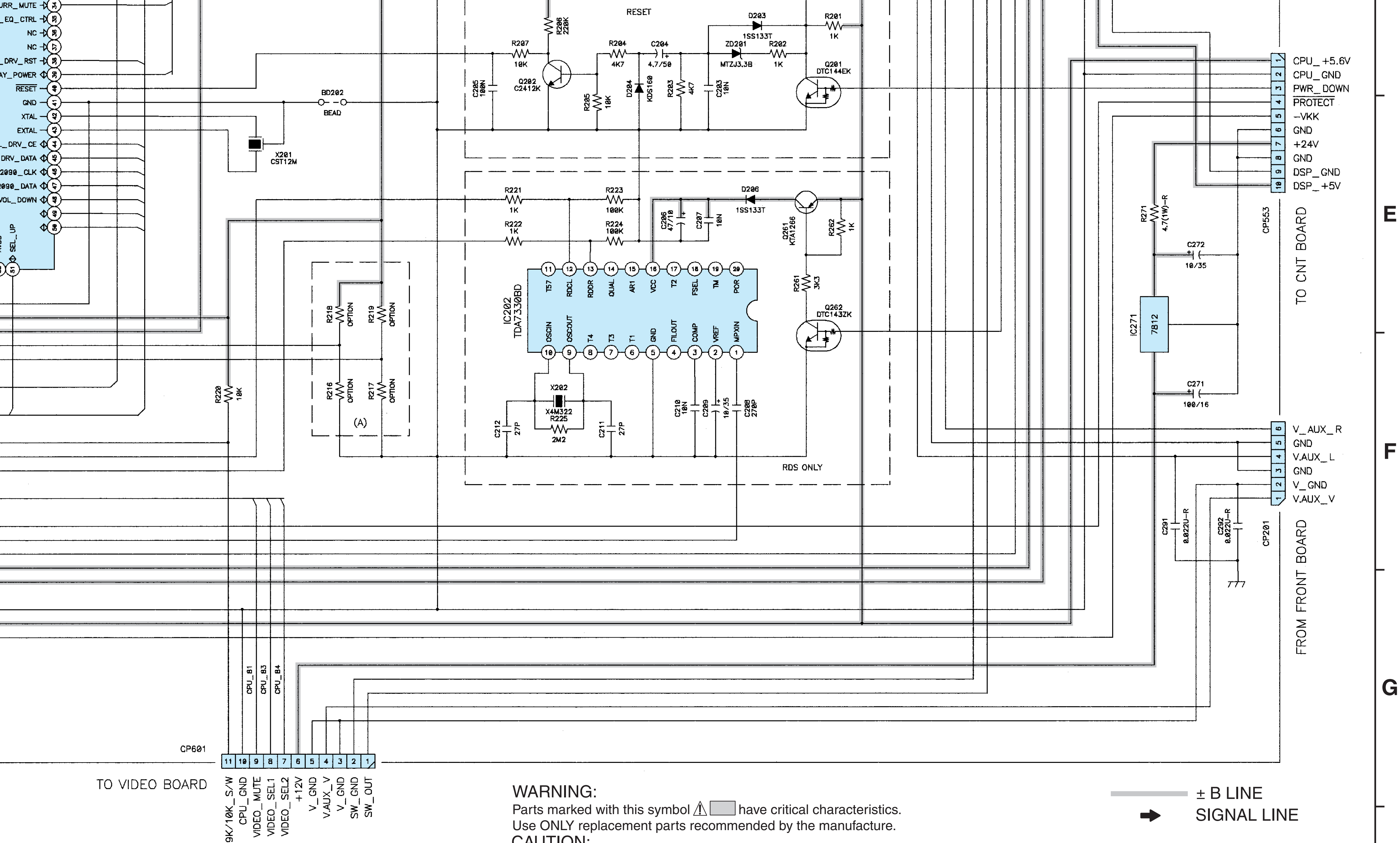


NO
ALL
ALL
EA
CO
CIF
NO



* MODEL _ OPTION

MODEL(PIN 58)	R217	R219
AVC – 1570	10K	OPEN
AVR – 683	10K	OPEN
AVR – 1603	10K	OPEN
1603 RDS	10K	18K



WARNING:
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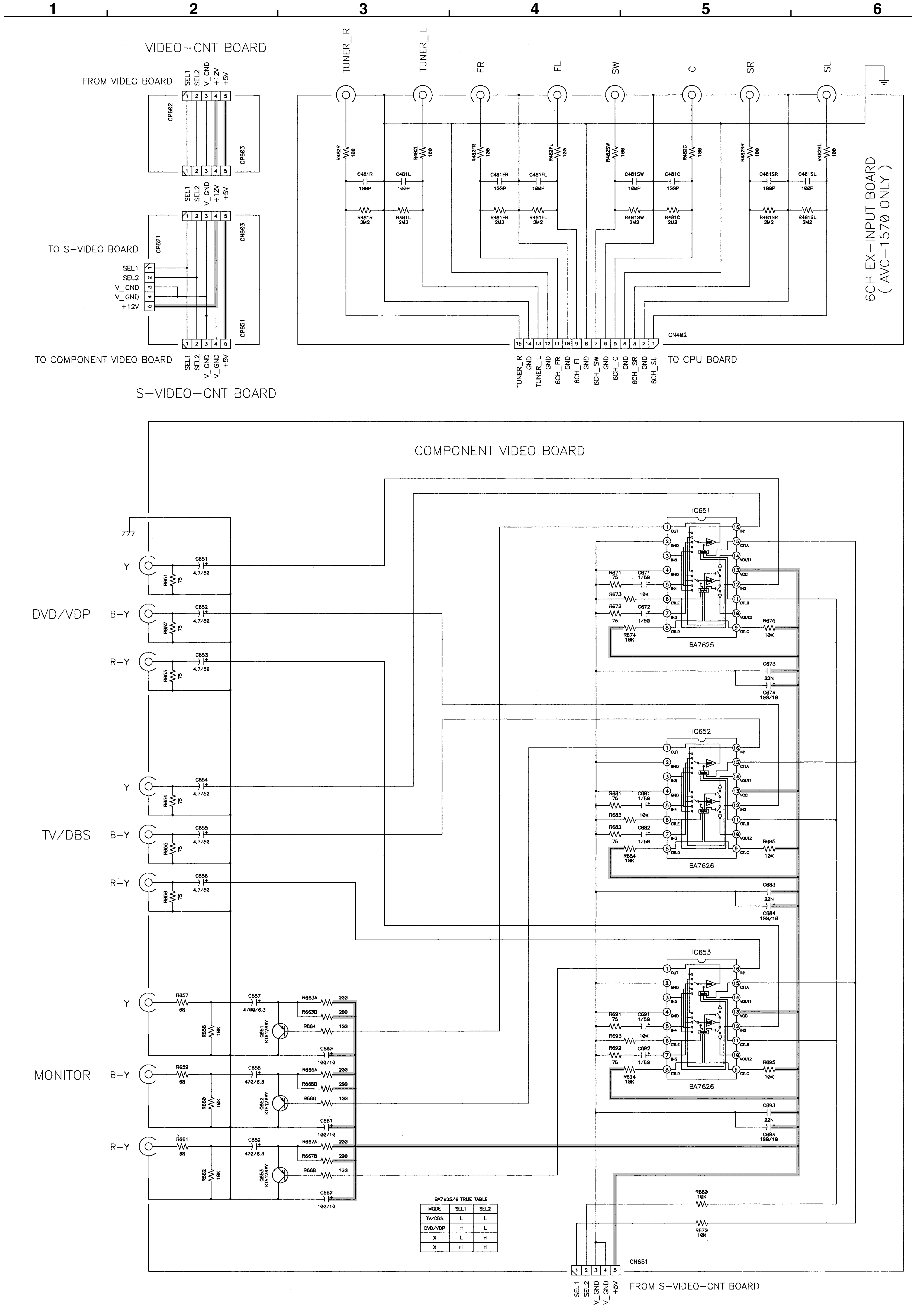
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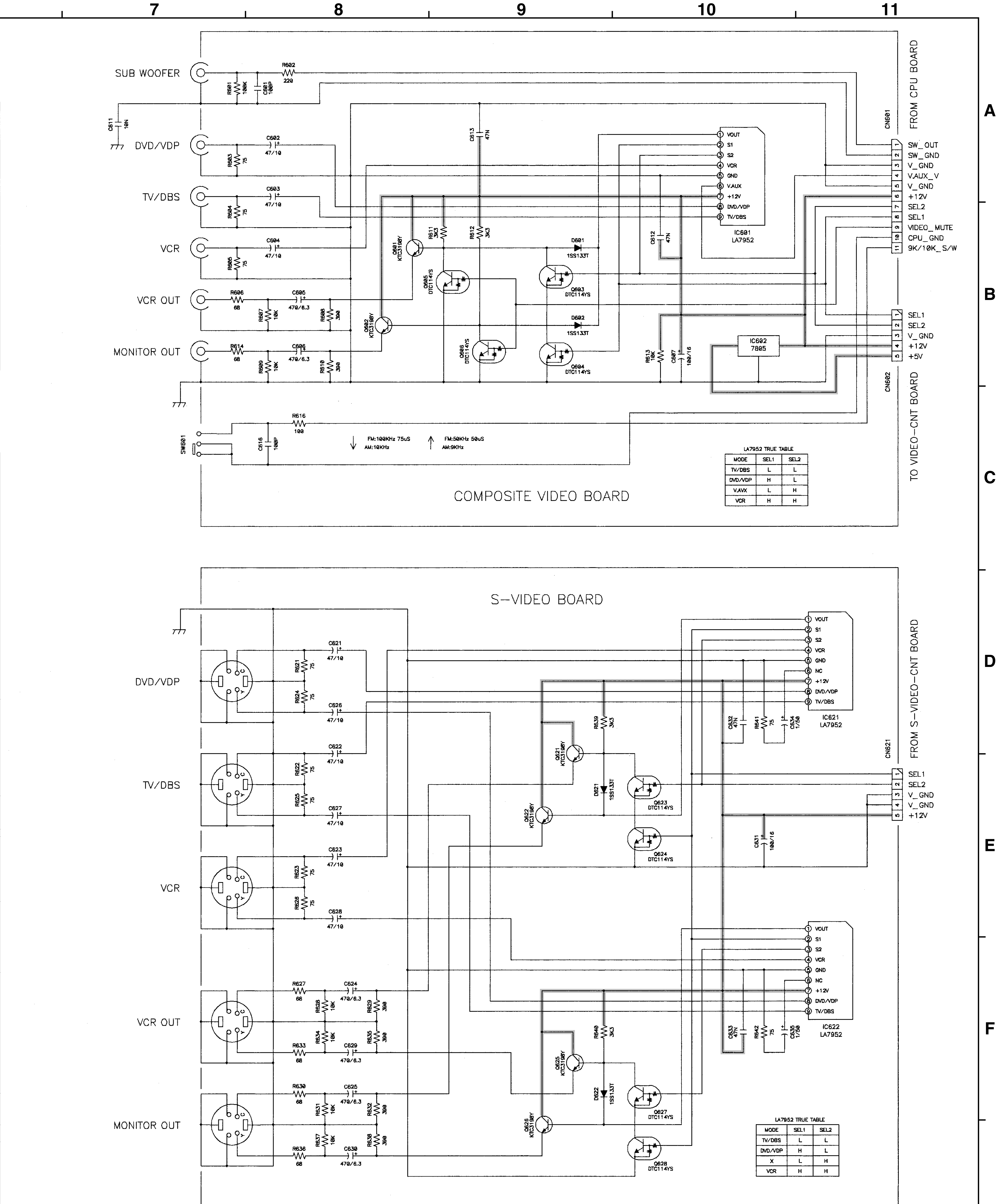
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SCHEMATIC DIAGRAMS (5/8)
CPU UNIT

SCHEMATIC DIAGRAMS (6/8)





NOTICE:
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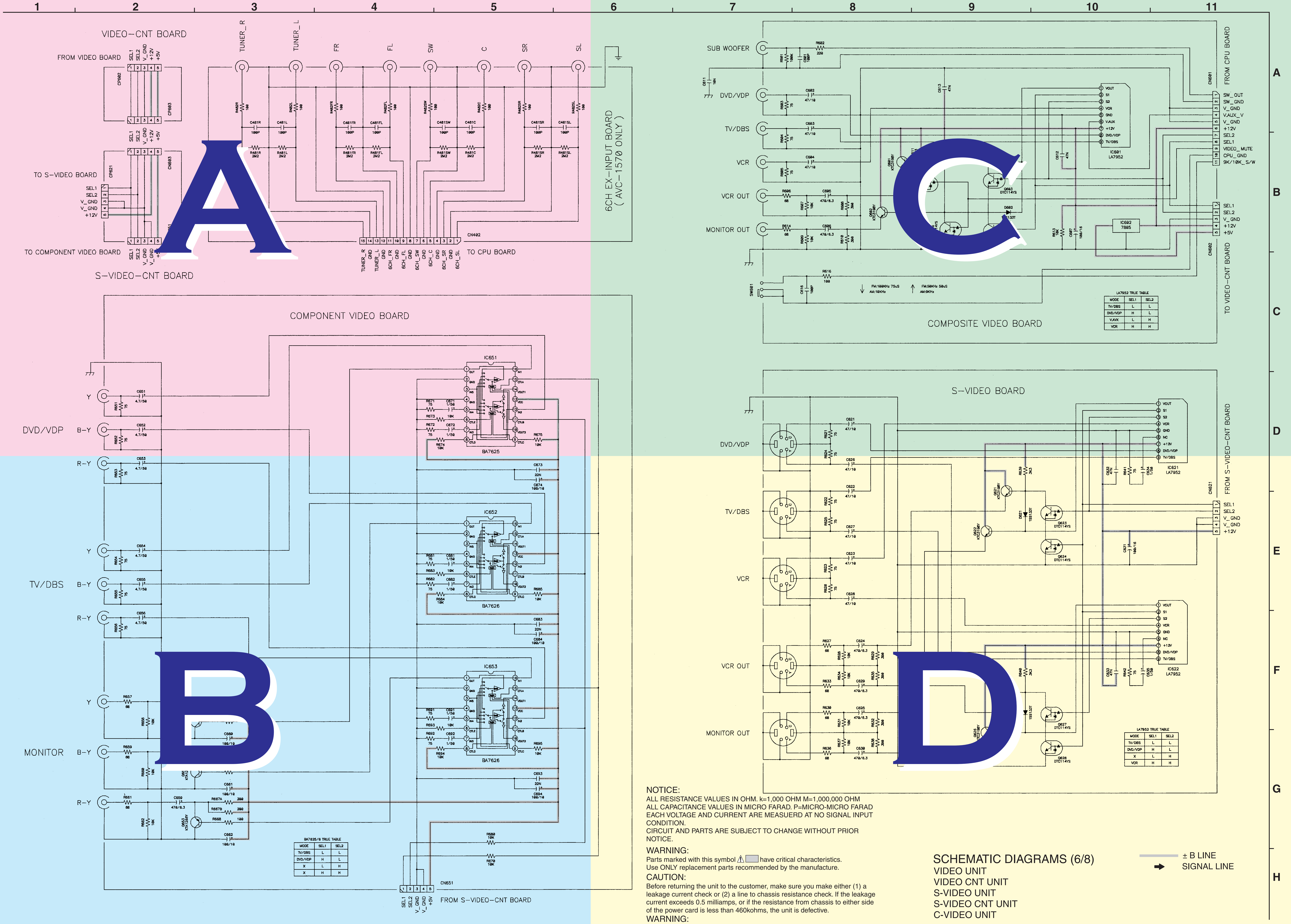
CAUTION:
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WARNING:
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SCHEMATIC DIAGRAMS (6/8)
VIDEO UNIT
VIDEO CNT UNIT
S-VIDEO UNIT
S-VIDEO CNT UNIT
C-VIDEO UNIT

± B LINE
SIGNAL LINE

SCHEMATIC DIAGRAMS (6/8)



NOTICE:
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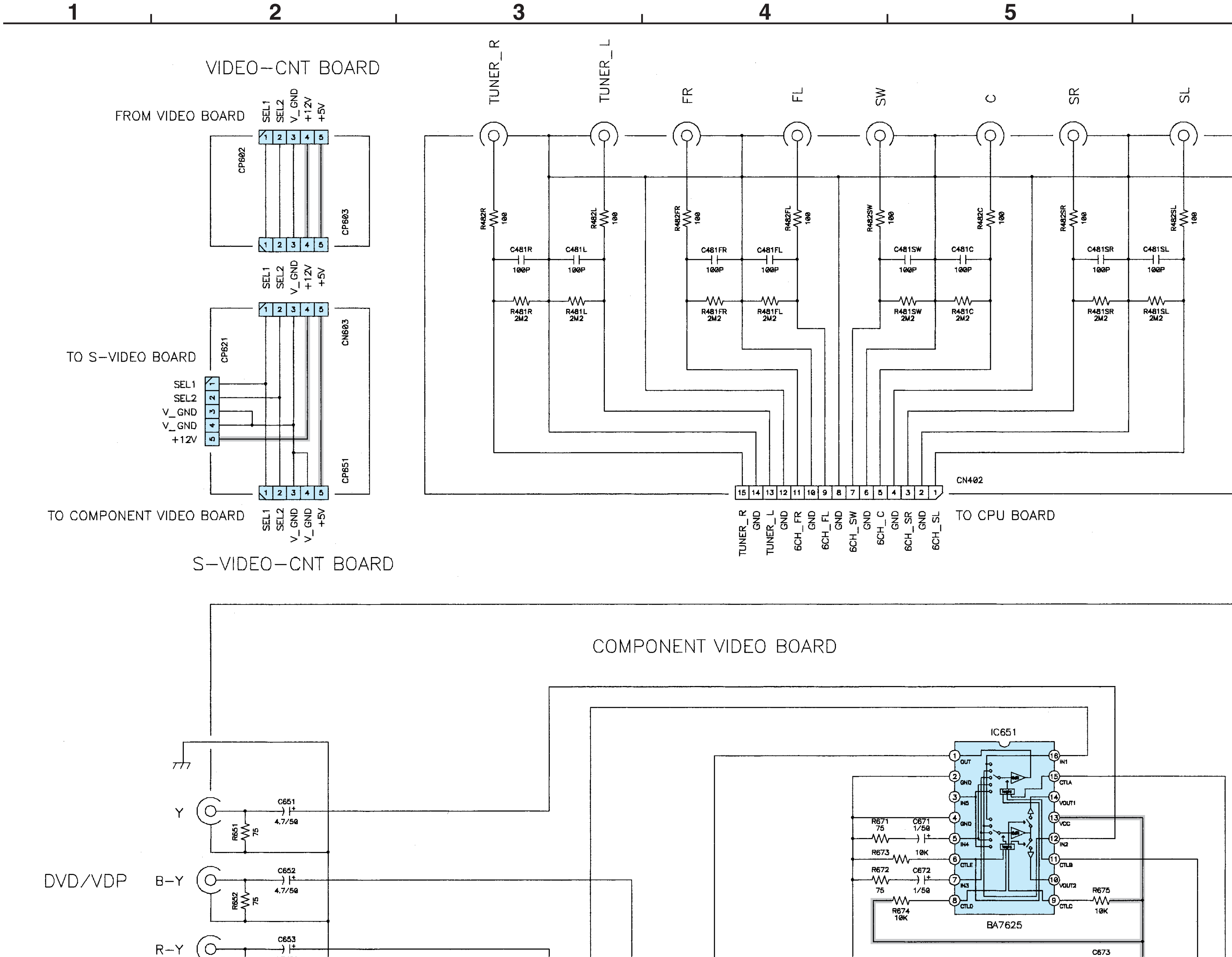
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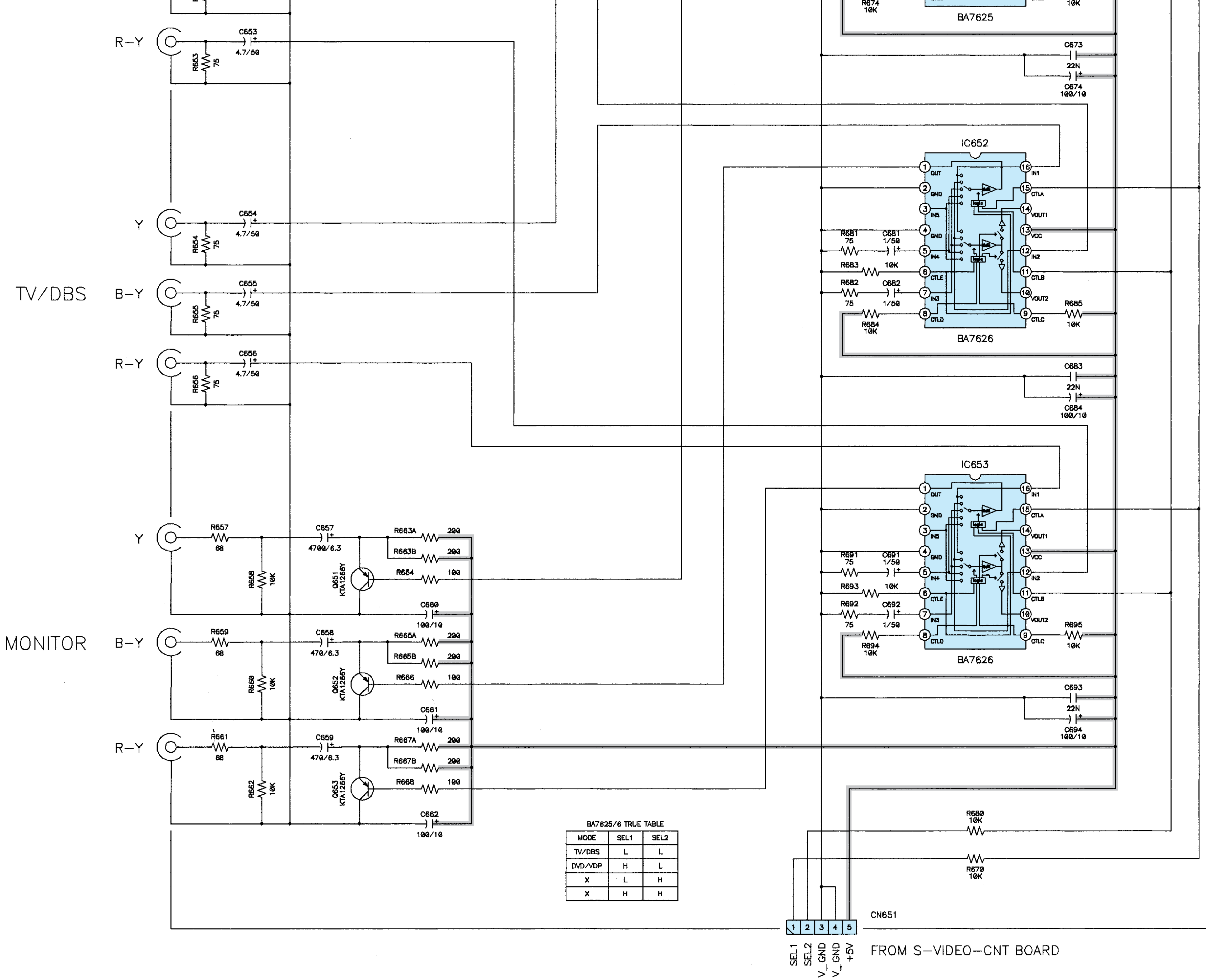
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SCHEMATIC DIAGRAMS (6/8)
VIDEO UNIT
VIDEO CNT UNIT
S-VIDEO UNIT
S-VIDEO CNT UNIT
C-VIDEO UNIT

± B LINE
➡ SIGNAL LINE

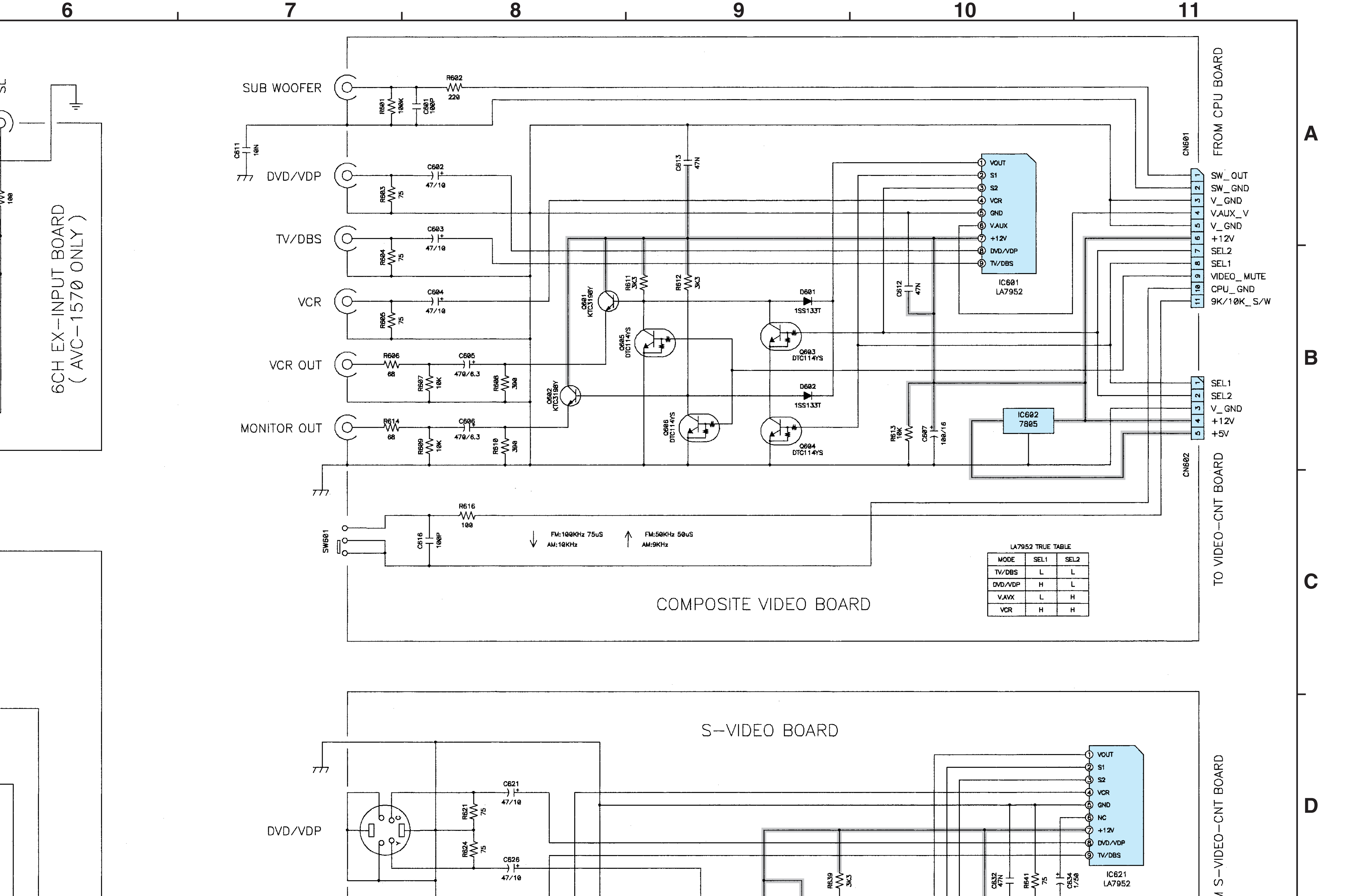
SCHEMATIC DIAGRAMS (6/8)





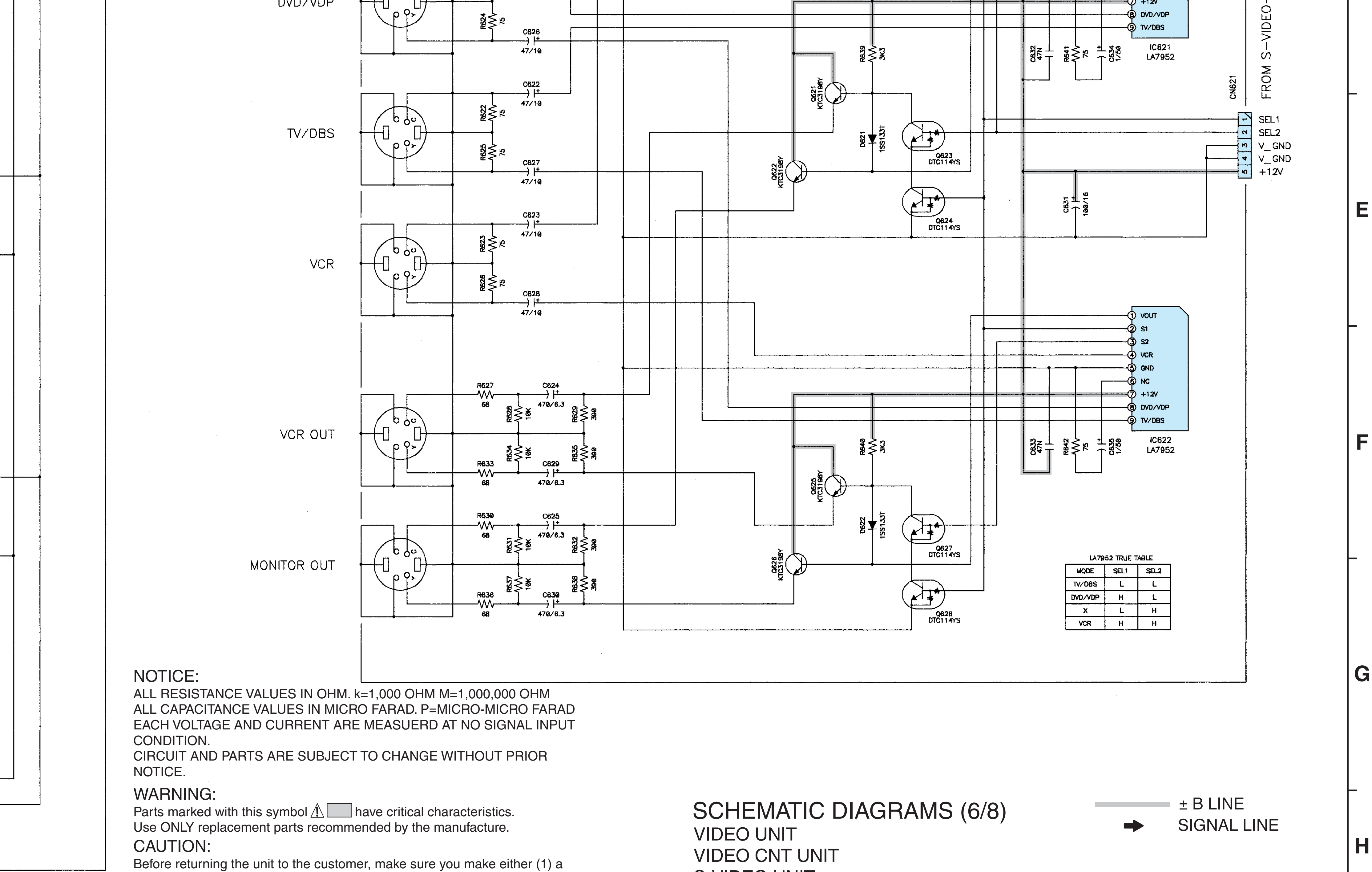
BA7625/6 TRUE TABLE

MODE	SEL1	SEL2
TV/DBS	L	L
DVD/VDP	H	L
X	L	H
X	H	H



LA7952 TRUE TABLE

MODE	SEL1	SEL2
TV/DBS	L	L
DVD/VDP	H	L
V.AVX	L	H
VCR	H	H



LA7952 TRUE TABLE

MODE	SEL1	SEL2
TV/DBS	L	L
DVD/VDP	H	L
X	L	H
VCR	H	H

NOTICE:
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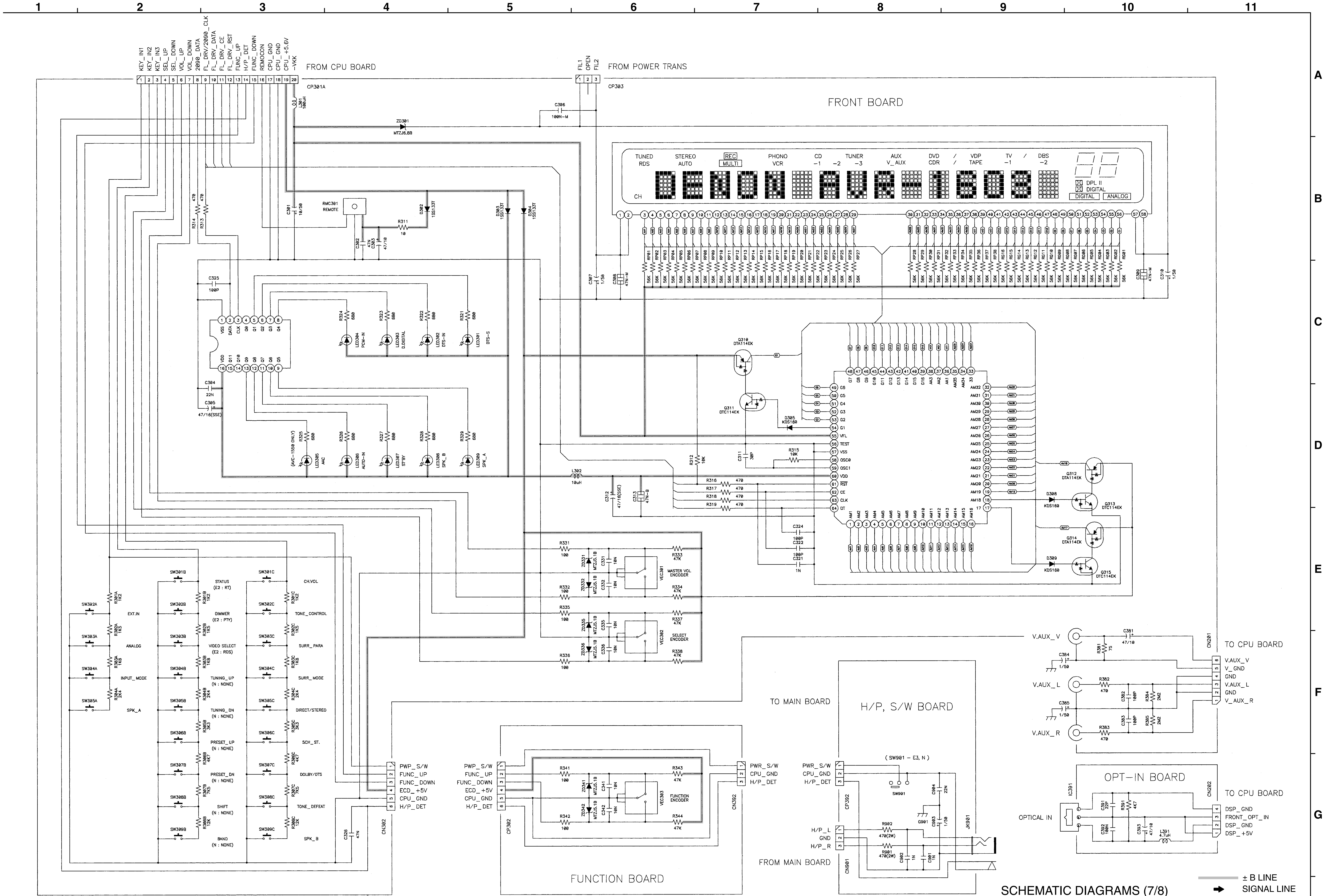
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WARNING:
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SCHEMATIC DIAGRAMS (6/8)
VIDEO UNIT
VIDEO CNT UNIT
S-VIDEO UNIT
S-VIDEO CNT UNIT
C-VIDEO UNIT

± B LINE
➡ SIGNAL LINE

SCHEMATIC DIAGRAMS (7/8)



NOTICE:
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CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

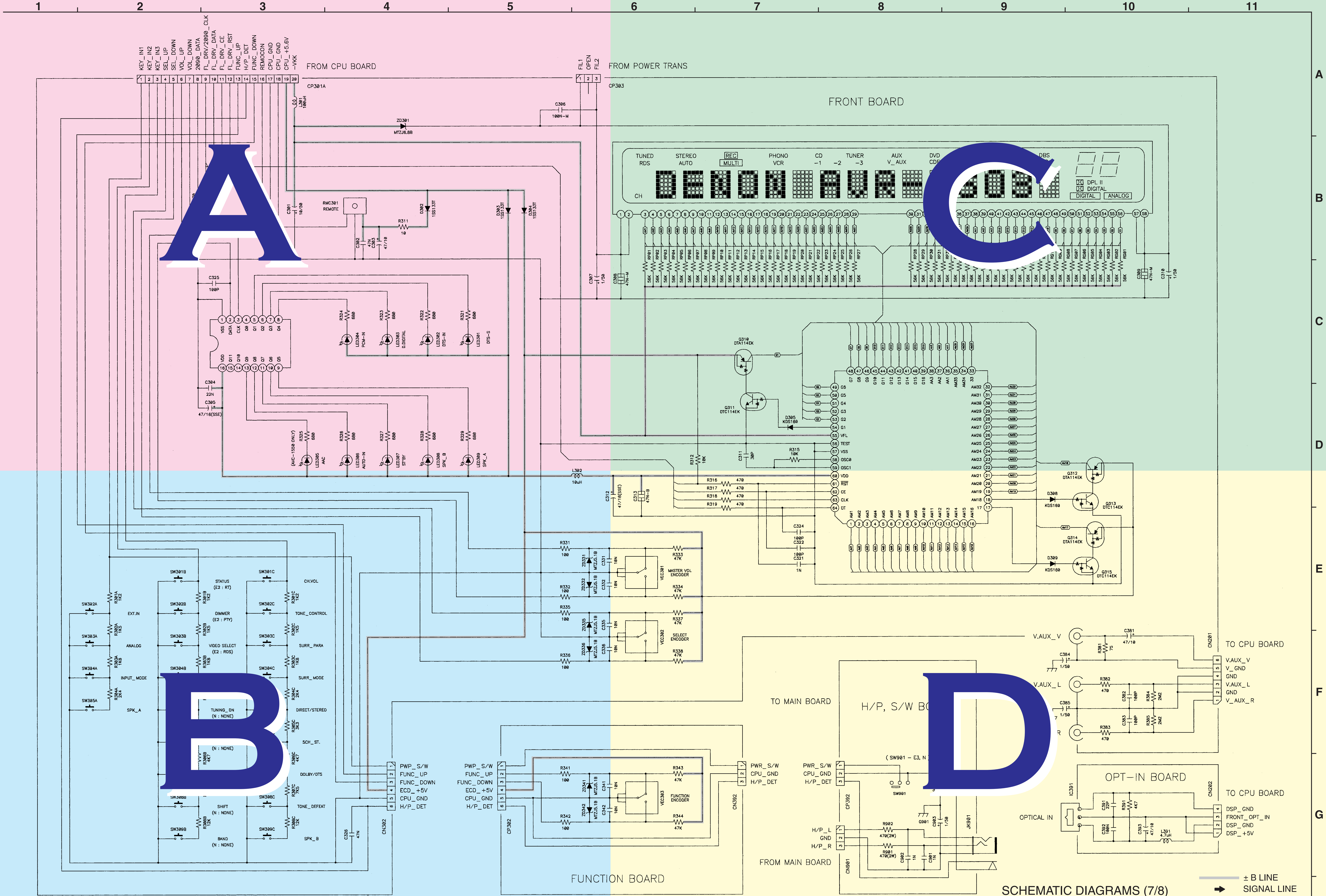
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WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (7/8)
FRONT UNIT
OPTICAL-IN UNIT
POWER-SW UNIT
ENCODER UNIT
HEADPHONE UNIT

SCHEMATIC DIAGRAMS (7/8)



± B LINE

SIGNAL LINE

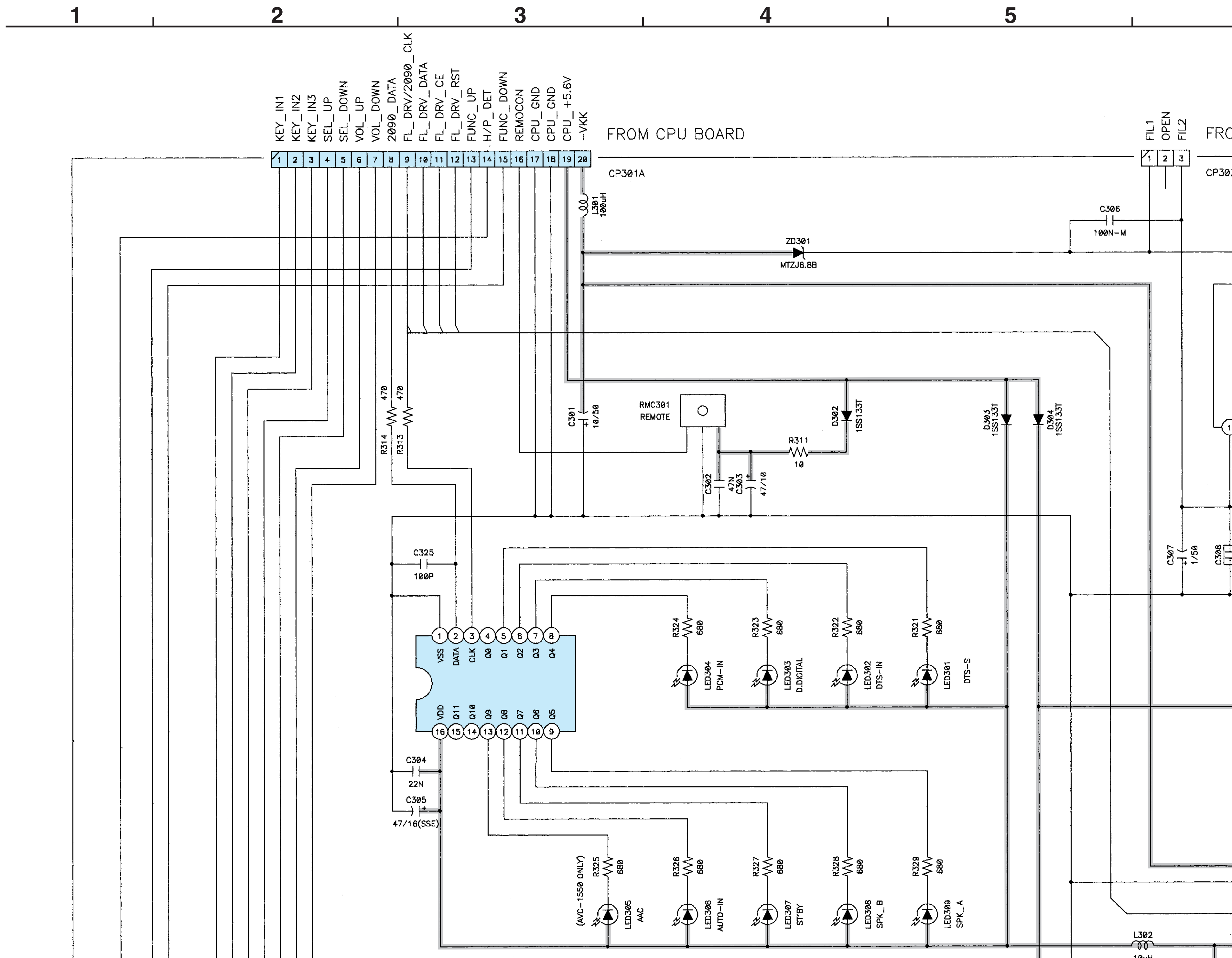
NOTICE:
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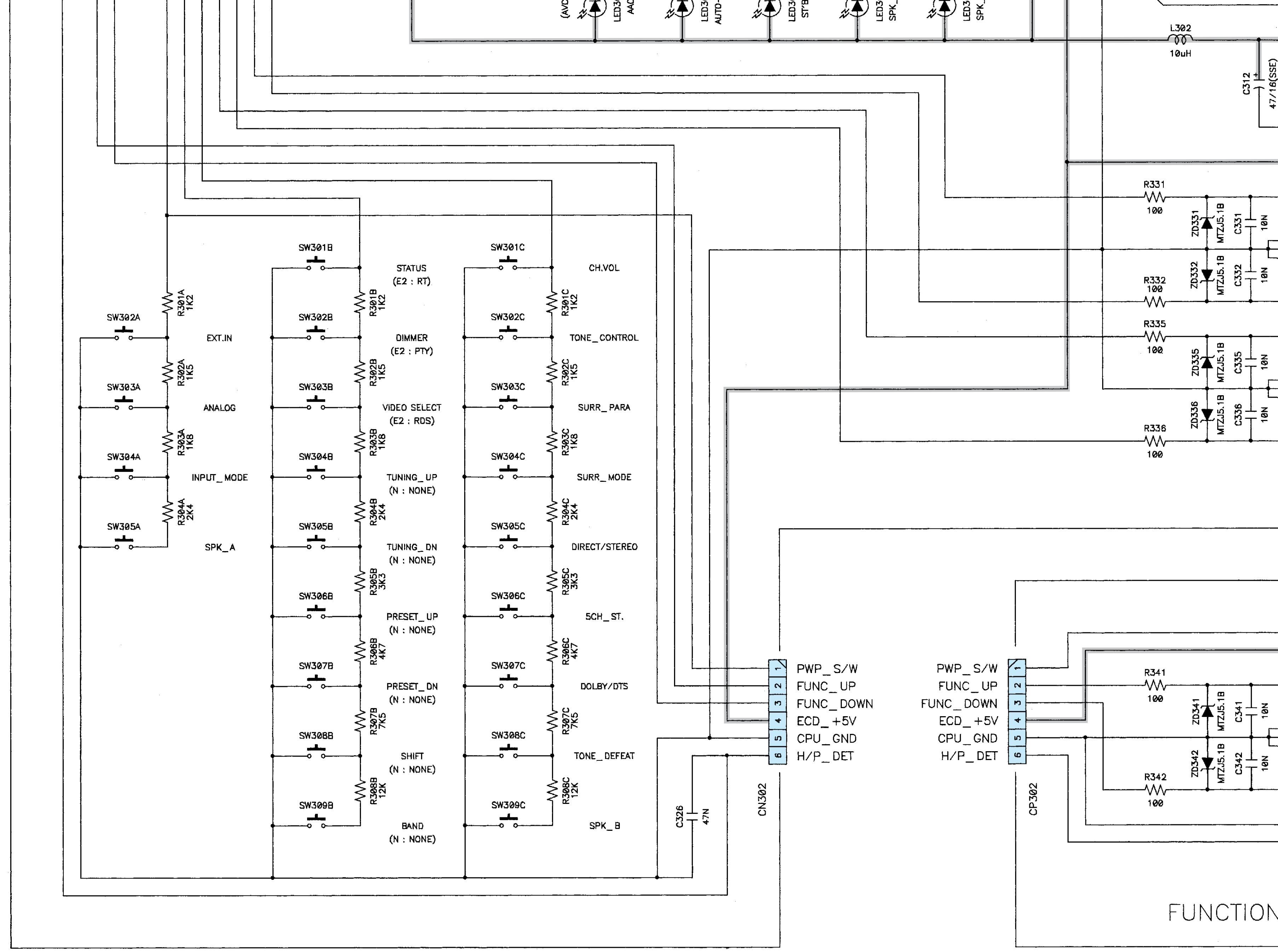
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SCHEMATIC DIAGRAMS (7/8)
FRONT UNIT
OPTICAL-IN UNIT
POWER-SW UNIT
ENCODER UNIT
HEADPHONE UNIT


1
2
3
4
5
KEY_IN1
KEY_IN2
KEY_IN3
SEL_UP
SEL_DOWN
VOL_UP
VOL_DOWN
2090_DATA
FL_DRV/2090_CLK
FL_DRV_DATA
FL_DRV_CE
FL_DRV_RST
FUNC_UP
H/P_DET
FUNC_DOWN
REMOCON
CPU_GND
CPU_GND
CPU_+5.6V
-VKK
FROM CPU BOARD
CP301A
FIL1
OPEN
FIL2
L301 100uH
C306 100N-M
ZD301 MTZJ6.8B
RMC301 REMOTE
R311 10
D302 1SS133T
D303 1SS133T
D304 1SS133T
R314 470
R313 470
C301 10/50
C302 47N
C303 47/10
C307 1/50
C308
C325 100P
VSS DATA CLK Q0 Q1 Q2 Q3 Q4
VDD Q11 Q10 Q9 Q8 Q7 Q6 Q5
R324 680
R323 680
R322 680
R321 680
LED304 PCM-IN
LED303 D.DIGITAL
LED302 DTS-IN
LED301 DTS-S
C304 22N
C305 47/16(SSE)
(AVC-1550 ONLY)
R325 680
R326 680
R327 680
R328 680
R329 680
LED305 AAC
LED306 AUTO-IN
LED307 ST'BY
LED308 SPK_B
LED309 SPK_A
L302 10uH

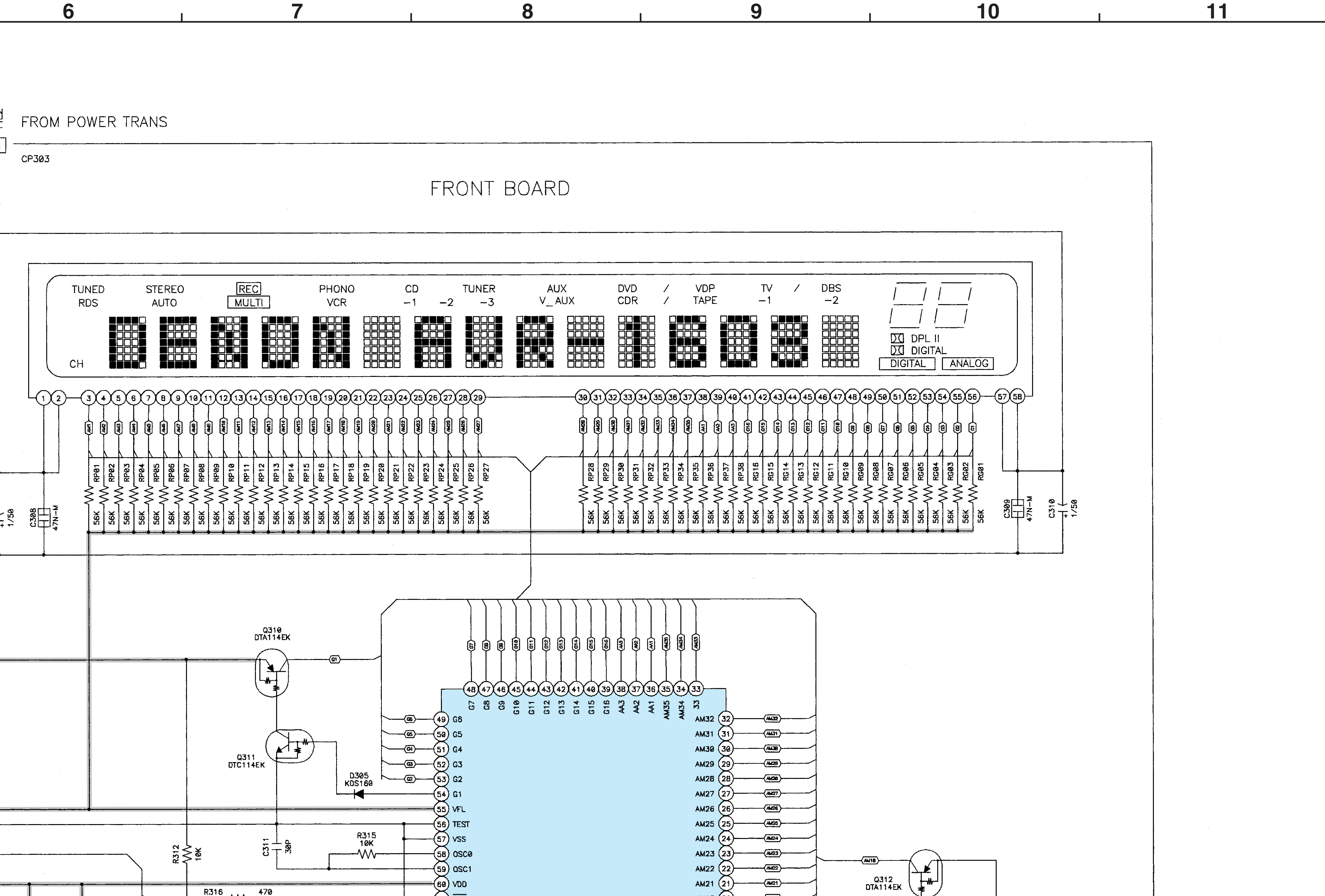


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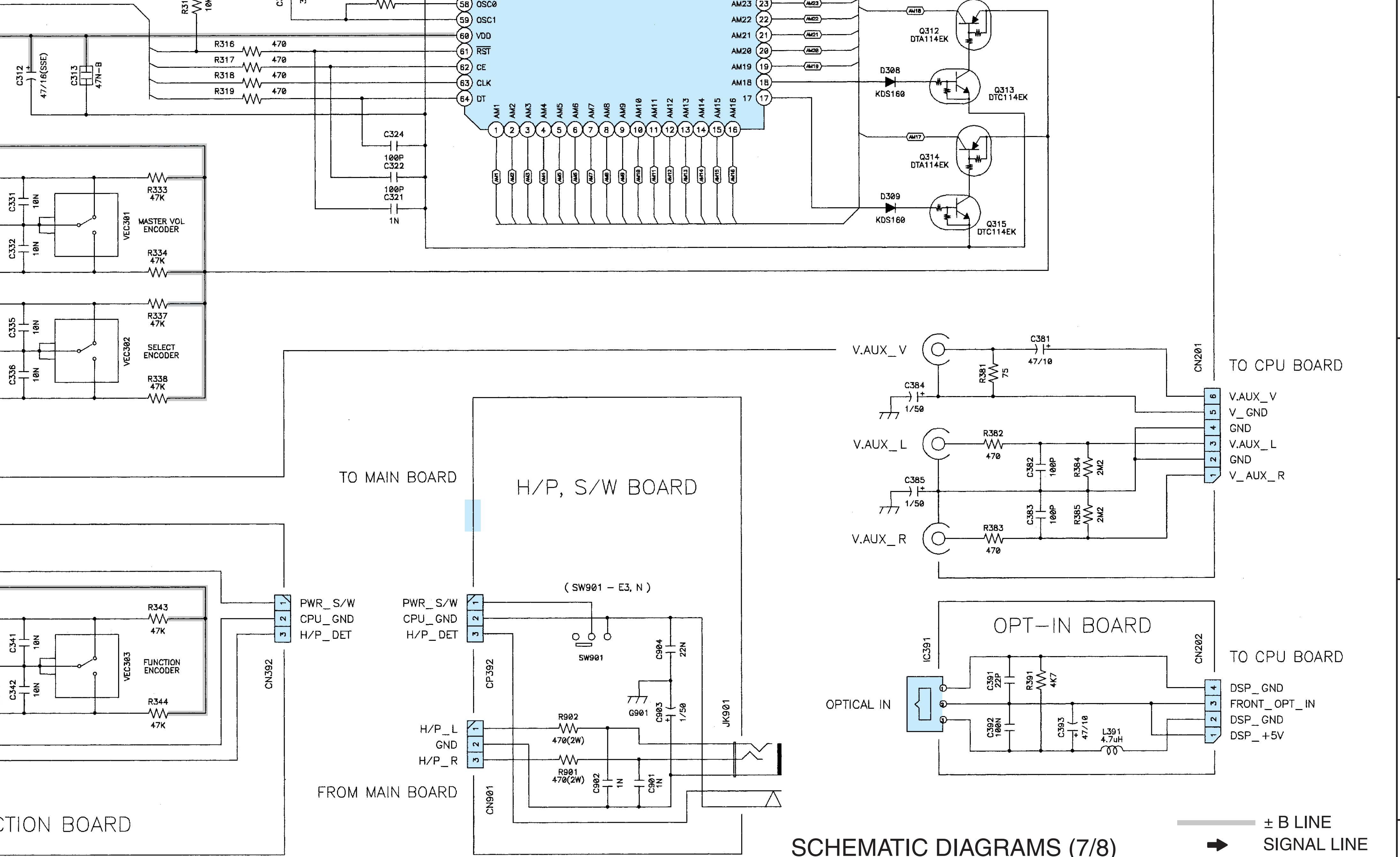
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WARNING:
DO NOT return the unit to the cu
corrected.



FROM POWER TRANS
CP303
FRONT BOARD
TUNED RDS
STEREO AUTO
REC
MULTI
PHONO VCR
CD -1 -2
TUNER -3
AUX V_AUX
DVD / CDR /
VDP TAPE
TV / -1
DBS -2
CH
DPL II
DIGITAL
DIGITAL
ANALOG
C308 47N-M
1/50
C309 47N-M
C310 1/50
56K
Q310 DTA114EK
Q311 DTC114EK
D305 KDS160
R312 10K
C311 30P
R315 10K
R316 470
Q312 DTA114EK
G6
G5
G4
G3
G2
G1
VFL
TEST
VSS
OSC0
OSC1
VDD
AM32
AM31
AM30
AM29
AM28
AM27
AM26
AM25
AM24
AM23
AM22
AM21

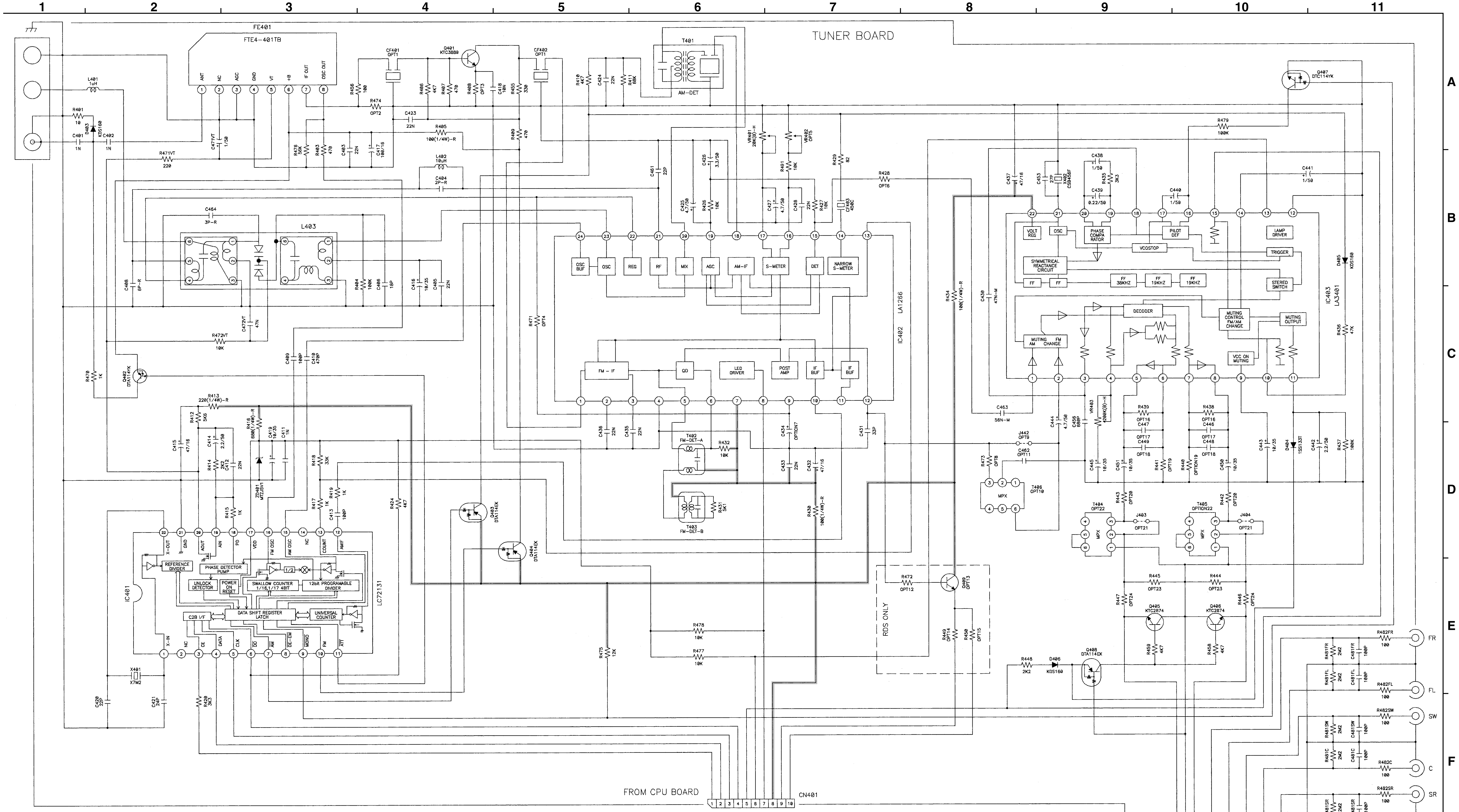


to the customer until the problem is located and

SCHEMATIC DIAGRAMS (7/8)

FRONT UNIT
OPTICAL-IN UNIT
POWER-SW UNIT
ENCODER UNIT
HEADPHONE UNIT

SCHEMATIC DIAGRAMS (8/8)



	R-NO.	USA(E3)	EUROPE(E2)	MULTI, C, K
OPT1	CF401/CF402	SFE10.7MA8	SFE10.7MS3	10.7MA8/MS3
OPT2	R474	–	180	–
OPT3	R407/R408	470/1.2K	620/680	620/1.2K
OPT4	R471	18K	39K	39K
OPT5	VR402	50KB	100KB	50KB
OPT6	R428	3.3K	10K	6.8K
OPT7	C434	1/50	0.33/50	0.33/50
OPT8	R473	–	2.4K	–

	R-NO.	USA(E3)	EUROPE(E2)	MULTI, C, K
OPT9	J442	JUMPER	–	JUMPER
OPT10	T406	–	ANTI–BIRDIE	–
OPT11	C462	–	470P	–
OPT12	R472	–	100	–
OPT13	Q409	–	KTC3880	–
OPT14	R449	–	3.9K	–
OPT15	R450	–	1K	–
OPT16	R438,R439	100K	150K	100K

	R-NO.	USA(E3)	EUROPE(E2)	MULTI, C, K
OPT17	C446,C447	270P	330P	180P
OPT18	C448,C449	470P	–	330P
OPT19	R440,R441	120K	220K	120K
OPT20	R442,R443	3.3K	2.2K	3.3K
OPT21	J403,J404	JUMPER	–	JUMPER
OPT22	T404,T405	–	LPF(MPX)	–
OPT23	R444,R445	8.2K	3.3K	8.2K
OPT24	R446,R447	JUMPER	470	JUMPER

± B LINE
SIGNAL LINE

NOTICE:
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASUERD AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

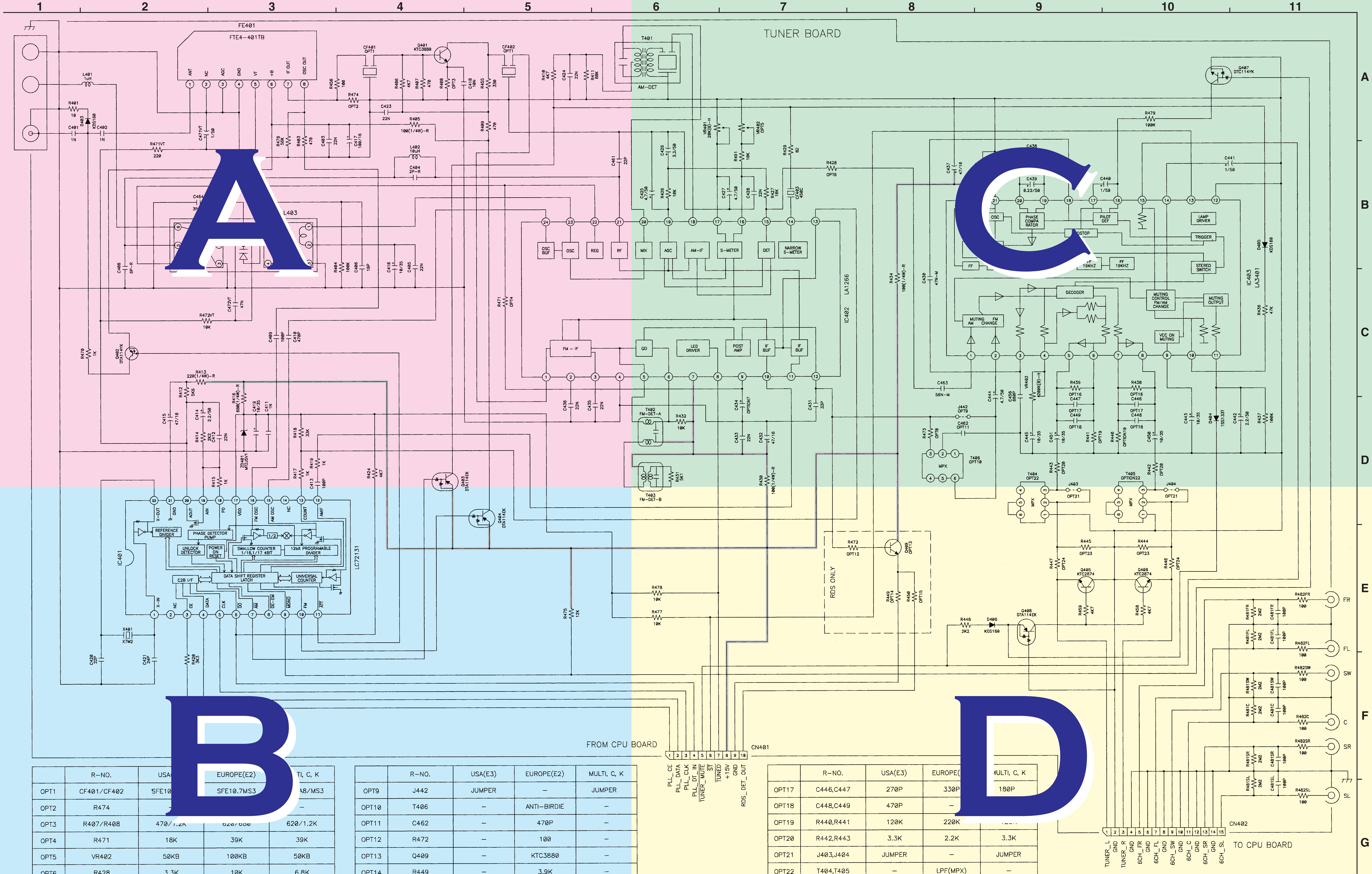
WARNING:
Parts marked with this symbol ⚠ have critical characteristics.
Use ONLY replacement parts recommended by the manufacture.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power card is less than 460kohms, the unit is defective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

SCHEMATIC DIAGRAMS (8/8)
TUNER UNIT

SCHEMATIC DIAGRAMS (8/8)



	R-NO.	USA(	EUROPE(E2)	TI, C, K
OPT1	CF401/CF402	SFE10	SFE10.7MS3	A8/MS3
OPT2	R474	[illegible]	[illegible]	–
OPT3	R407/R408	470/[illegible]	[illegible]	620/1.2K
OPT4	R471	18K	39K	39K
OPT5	VR402	50KB	100KB	50KB
OPT6	R428	3.3K	10K	6.8K
OPT7	C434	1/50	0.33/50	0.33/50
OPT8	R473	–	2.4K	–

	R-NO.	USA(E3)	EUROPE(E2)	MULTI, C, K
OPT9	J442	JUMPER	–	JUMPER
OPT10	T406	–	ANTI–BIRDIE	–
OPT11	C462	–	470P	–
OPT12	R472	–	100	–
OPT13	Q409	–	KTC3880	–
OPT14	R449	–	3.9K	–
OPT15	R450	–	1K	–
OPT16	R438,R439	100K	150K	100K

	R-NO.	USA(E3)	EUROPE(	ULTI, C, K
OPT17	C446,C447	270P	330P	180P
OPT18	C448,C449	470P	–	[illegible]
OPT19	R440,R441	120K	220K	[illegible]
OPT20	R442,R443	3.3K	2.2K	3.3K
OPT21	J403,J404	JUMPER	–	JUMPER
OPT22	T404,T405	–	LPF(MPX)	–
OPT23	R444,R445	8.2K	3.3K	8.2K
OPT24	R446,R447	JUMPER	470	JUMPER

± B LINE
SIGNAL LINE

NOTICE:
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
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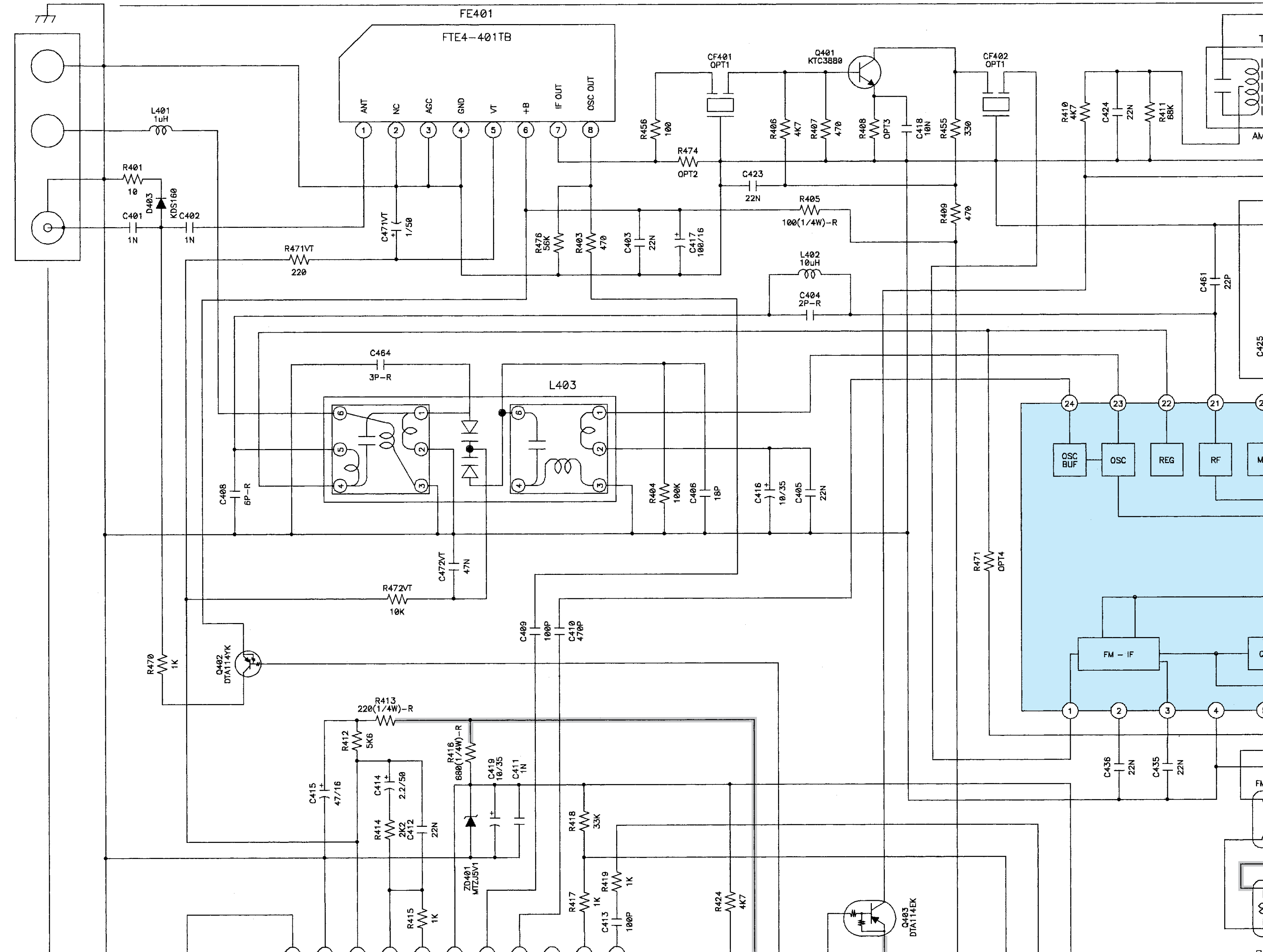
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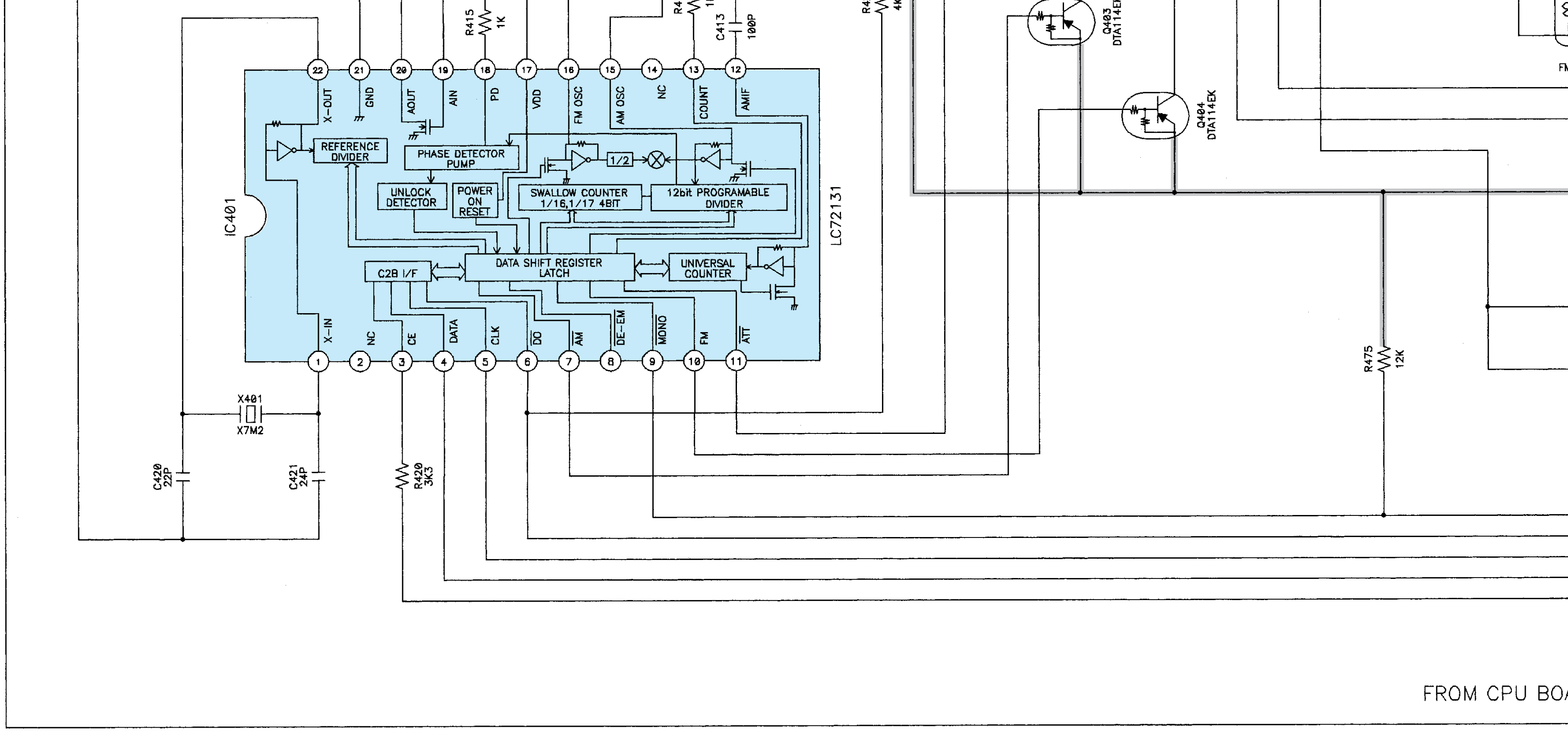
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WARNING:
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SCHEMATIC DIAGRAMS (8/8)
TUNER UNIT

1 2 3 4 5


FE401
FTE4-401TB
ANT
NC
AGC
GND
VT
+B
IF OUT
OSC OUT
L401
1uH
R401
10
D403
KDS160
C401
1N
C402
1N
C471VT
1/50
R471VT
220
CF401
OPT1
Q401
KTC3880
CF402
OPT1
R456
100
R474
OPT2
C423
22N
R406
4K7
R407
470
R408
OPT3
C418
10N
R455
330
R405
100(1/4W)-R
R409
470
R476
56K
R403
470
C403
22N
C417
100/16
L402
10uH
C404
2P-R
R410
4K7
C424
22N
R411
68K
C461
22P
C425
C464
3P-R
L403
C408
6P-R
R404
100K
C406
18P
C416
10/35
C405
22N
OSC BUF
OSC
REG
RF
FM - IF
R471
OPT4
C472VT
47N
R472VT
10K
C409
100P
C410
470P
R470
1K
Q402
DTA114YK
R413
220(1/4W)-R
R412
5K6
R416
680(1/4W)-R
C419
10/35
C411
1N
C415
47/16
C414
2.2/50
R414
2K2
C412
22N
ZD401
MTZJ5V1
R418
33K
R419
1K
R417
1K
C413
100P
R415
1K
R424
4K7
Q403
DTA114EK
C436
22N
C435
22N



	R-NO.	USA(E3)	EUROPE(E2)	MULTI, C, K
OPT1	CF401/CF402	SFE10.7MA8	SFE10.7MS3	10.7MA8/MS3
OPT2	R474	–	180	–
OPT3	R407/R408	470/1.2K	620/680	620/1.2K
OPT4	R471	18K	39K	39K
OPT5	VR402	50KB	100KB	50KB
OPT6	R428	3.3K	10K	6.8K
OPT7	C434	1/50	0.33/50	0.33/50
OPT8	R473	–	2.4K	–

	R-NO.	USA(E3)	EUROPE(E2)	MULTI, C, K
OPT9	J442	JUMPER	–	JUMPER
OPT10	T406	–	ANTI–BIRDIE	–
OPT11	C462	–	470P	–
OPT12	R472	–	100	–
OPT13	Q409	–	KTC3880	–
OPT14	R449	–	3.9K	–
OPT15	R450	–	1K	–
OPT16	R438,R439	100K	150K	100K

NOTICE:

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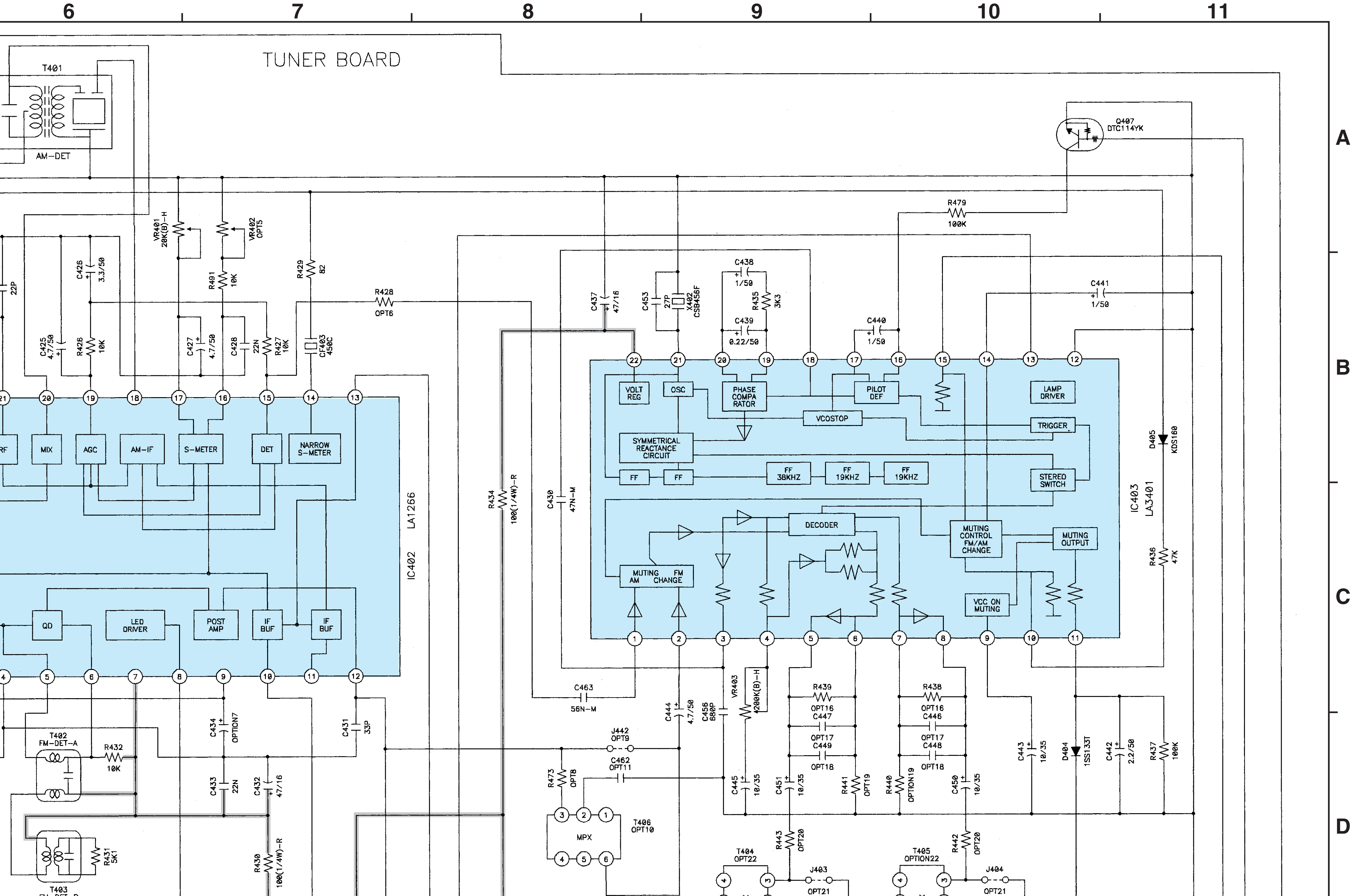
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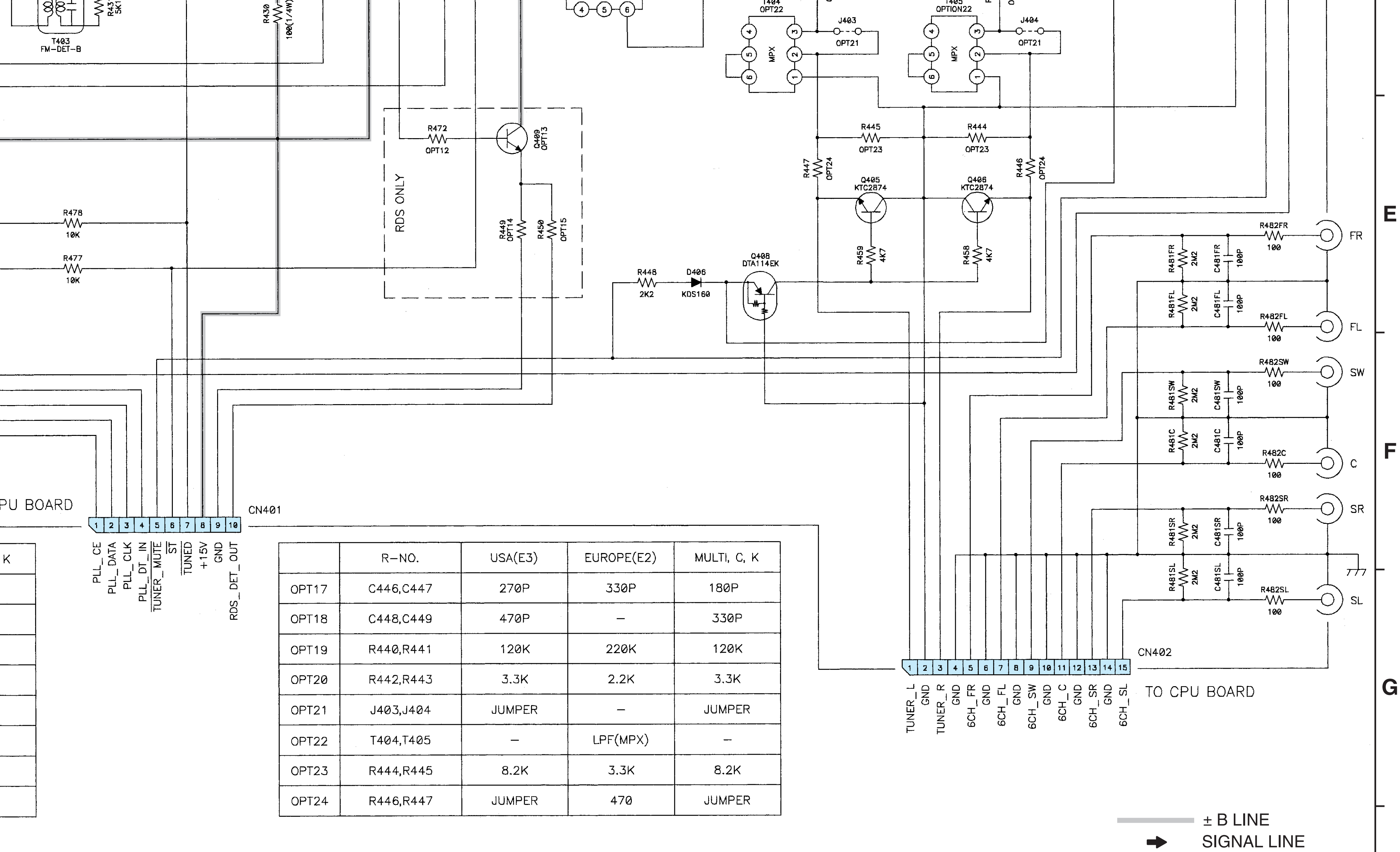
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WARNING:

DO NOT return the unit to th
corrected.


6
7
8
9
10
11
A
B
C
D
TUNER BOARD
T401
AM-DET
VR401 20K(B)-H
VR402 OPT5
R429 82
R428 OPT6
C426 3.3/50
22P
R491 10K
C425 4.7/50
R426 10K
C427 4.7/50
C428 22N
R427 10K
CF403 450C
RF
MIX
AGC
AM-IF
S-METER
DET
NARROW S-METER
LA1266
IC402
QD
LED DRIVER
POST AMP
IF BUF
IF BUF
T402 FM-DET-A
R432 10K
C434 OPTION7
C431 33P
C433 22N
C432 47/16
R431 5K1
T403
R430 100(1/4W)-R
R434 100(1/4W)-R
C430 47N-M
C437 47/16
C453 27P
X402 CSB456F
C438 1/50
R435 3K3
C439 0.22/50
C440 1/50
R479 100K
Q407 DTC114YK
C441 1/50
VOLT REG
OSC
PHASE COMPA RATOR
PILOT DEF
LAMP DRIVER
VCOSTOP
TRIGGER
SYMMETRICAL REACTANCE CIRCUIT
FF
FF
FF 38KHZ
FF 19KHZ
FF 19KHZ
STEREO SWITCH
DECODER
MUTING CONTROL FM/AM CHANGE
MUTING OUTPUT
MUTING AM
FM CHANGE
VCC ON MUTING
IC403 LA3401
D405 KDS160
R436 47K
C463 56N-M
J442 OPT9
C462 OPT11
R473 OPT8
T406 OPT10
MPX
C444 4.7/50
C456 680P
VR403 200K(B)-H
R439 OPT16
C447 OPT17
C449 OPT18
R438 OPT16
C446 OPT17
C448 OPT18
C445 10/35
C451 10/35
R441 OPT19
R440 OPTION19
C450 10/35
C443 10/35
D404 1SS133T
C442 2.2/50
R437 100K
R443 OPT20
R442 OPT20
T404 OPT22
T405 OPTION22
J403 OPT21
J404 OPT21



	R-NO.	USA(E3)	EUROPE(E2)	MULTI, C, K
OPT17	C446,C447	270P	330P	180P
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OPT21	J403,J404	JUMPER	–	JUMPER
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OPT23	R444,R445	8.2K	3.3K	8.2K
OPT24	R446,R447	JUMPER	470	JUMPER

unit to the customer until the problem is located and

SCHEMATIC DIAGRAMS (8/8)
TUNER UNIT